

Quarterly Economic Commentary

David Duffy
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Winter 2013



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Special Articles

Research Note

Research Bulletins

A subscription to the *Quarterly Economic Commentary* costs €327 per year, including VAT and postage. This includes online access to the full text on the day of publication.

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Summary Table

	2010	2011	2012	2013	2014
Output (Real Annual Growth %)					
Private Consumer Expenditure	0.9	-1.6	-0.3	0.3	1.5
Public Net Current Expenditure	-6.9	-2.8	-3.7	0.3	-1.3
Investment	-22.6	-9.5	-1.0	2.1	4.5
Exports	6.4	5.4	1.6	0.3	4.6
Imports	3.6	-0.4	0.0	0.9	3.9
Gross Domestic Product (GDP)	-1.1	2.2	0.2	0.3	2.7
Gross National Product (GNP)	0.5	-1.6	1.8	2.0	2.7

Prices (Annual Growth %)					
Consumer Price Index (CPI)	-1.0	2.6	1.7	0.5	0.8
Growth in Average Hourly Earnings	-3.5	0.4	0.8	1.0	1.4

Labour Market					
Employment Levels (ILO basis (000s))	1,882	1,849	1,839	1,884	1,923
Unemployment Levels (ILO basis (000s))	303	317	316	283	261
Unemployment Rate (as % of Labour Force)	13.9	14.6	14.7	13.1	12.0

Public Finance					
General Government Balance (€bn)	-48.3	-21.3	-13.5	-11.7	-7.6
General Government Balance (% of GDP)	-30.5	-13.1	-8.2	-7.1	-4.4
General Government Debt (% of GDP)	91.2	104.1	117.4	123.7	119.9

External Trade					
Balance of Payments Current Account (€bn)	1.8	2.0	7.3	8.2	9.8
Current Account (% of GNP)	1.4	1.5	5.5	6.0	7.0

Demand					
Final Demand	1.3	2.2	0.2	0.5	3.2
Domestic Demand	-4.4	-1.8	-1.6	0.9	1.4
Domestic Demand (excl. Stocks)	-5.0	-3.0	-1.1	0.6	1.4

Note: Detailed forecast tables are contained in an Appendix to this *Commentary*.

Summary

The Irish economy has turned the corner and domestic demand in 2013 is estimated to have grown by 0.9 per cent, the first increase in this aggregate since the crisis began. It is a portent of a stronger recovery in 2014 and 2015. On top of this mild recovery in domestic demand, there is a continuing stimulus to the economy from the export sector, in particular from the growth in exports of services. When taken together these developments mean that GNP is likely to have grown by 2 per cent this year and the current-account surplus is likely to have further increased on the 2012 outturn.

We are assuming that the EU economy will return to growth in 2014. The resulting growth in exports should complement the expected growth in domestic demand to produce a growth rate of GNP of around 2.7 per cent in 2014.

The two areas where important new information has become available since we published our last forecast are employment and the public finances.

The labour market is the most useful indicator as to what is happening in the Irish economy today – the *Quarterly National Accounts* do not give a true picture due to the ending of pharmaceutical patents. *Quarterly National Household Survey* (QNHS) data and *Live Register* data underpin our view that a recovery has begun in the Irish economy. The third quarter figures for employment (and unemployment) were even better than those for the previous three quarters, which also involved substantial growth. This has caused us to revise upwards our estimate of employment growth in 2013 to 2.5 per cent and to revise downwards our forecasts for unemployment next year to 12 per cent of the labour force. In addition, it is clear that employment of those with third-level education is growing particularly rapidly, promising a sustained increase in productivity in the future.

The latest exchequer returns for 11 months of the year also confirm the return to growth. It now looks likely that the government borrowing for 2013 will come in below target at around 7.1 per cent of GDP. While the Budget for 2014 was somewhat less stringent than we assumed in our last *Commentary*, it will, nonetheless, act as a drag on activity next year. However, the higher growth forecast for GNP in 2014 should also see an outperformance on the public finances, with the general government deficit coming in at around 4.4 per cent of GDP.

National Accounts 2012

A: Expenditure on Gross National Product

	2011	2012	Change in 2012		
	€bn	€bn	Value	Price	Volume
Private Consumer Expenditure	82.4	82.6	0.3	0.6	-0.3
Public Net Current Expenditure	25.7	25.1	-2.4	1.4	-3.7
Gross Fixed Capital Formation	17.3	17.4	1.0	2.0	-1.0
Exports of Goods and Services	167.0	176.7	5.9	4.2	1.6
Physical Changes in Stocks	1.0	0.4			
Final Demand	293.3	302.3	3.1	2.8	0.2
less:					
Imports of Goods and Services (M)	131.8	137.0	3.9	3.9	0.0
Statistical Discrepancy	1.1	-1.3			
GDP at Market Prices	162.6	163.9	0.8	0.7	0.2
Net Factor Payments (F)	-31.9	-31.3			
GNP at Market Prices	130.7	132.6	1.5	-0.3	1.8

B: Gross National Product by Origin

	2011	2012	Change in 2012	
	€bn	€bn	€bn	%
Agriculture	3.2	2.9	-0.3	-9.5
Non-Agriculture: Wages, etc.	68.3	68.4	0.1	0.1
Other	61.1	59.8	-1.3	-2.2
Adjustments: Stock Appreciation	-0.1	-0.1		
Statistical Discrepancy	-1.1	1.3		
Net Domestic Product	131.3	132.3	1.0	0.8
Net Factor Payments	-31.9	-31.3	0.6	-2.0
National Income	99.4	101.0	1.6	1.7
Depreciation	16.3	16.4	0.1	0.7
GNP at Factor Cost	115.6	117.4	1.8	1.5
Taxes less Subsidies	15.0	15.3	0.2	1.5
GNP at Market Prices	130.7	132.6	2.0	1.5

C: Balance of Payments on Current Account

	2011	2012	Change in 2012
	€bn	€bn	€bn
X – M	35.0	39.6	4.6
F	-31.9	-31.3	0.6
Net Transfers	-1.2	-1.2	0.0
Balance on Current Account	2.0	7.3	5.2
as % of GNP	1.5	5.5	

National Accounts 2013

A: Expenditure on Gross National Product

	2012	2013	Change in 2013		
	€bn	€bn	Value	Price	Volume
Private Consumer Expenditure	82.6	83.5	1.0	0.7	0.3
Public Net Current Expenditure	25.1	25.5	1.6	1.3	0.3
Gross Fixed Capital Formation	17.4	18.2	4.3	2.2	2.1
Exports of Goods and Services	176.7	177.9	0.7	0.4	0.3
Physical Changes in Stocks	0.4	0.8			
Final Demand	302.3	305.9	1.2	0.7	0.5
less:					
Imports of Goods and Services (M)	137.0	139.3	1.7	0.8	0.9
Statistical Discrepancy	-1.3	-1.4			
GDP at Market Prices	163.9	165.2	0.8	0.5	0.3
Net Factor Payments (F)	-31.3	-29.1			
GNP at Market Prices	132.6	136.1	2.6	0.6	2.0

B: Gross National Product by Origin

	2012	2013	Change in 2013	
	€bn	€bn	€bn	%
Agriculture	2.9	3.0	0.1	3.0
Non-Agriculture: Wages, etc.	68.4	70.1	1.7	2.5
Other	59.8	58.2	-1.5	-2.5
Adjustments: Stock Appreciation	-0.1	-0.1		
Statistical Discrepancy	1.3	1.4		
Net Domestic Product	132.3	132.6	0.3	0.3
Net Factor Payments	-31.3	-29.1	2.2	-6.9
National Income	101.0	103.5	2.5	2.5
Depreciation	16.4	16.4	0.0	0.1
GNP at Factor Cost	117.4	119.9	2.5	2.1
Taxes less Subsidies	15.3	16.2	0.9	5.9
GNP at Market Prices	132.6	136.1	3.4	2.6

C: Balance of Payments on Current Account

	2012	2013	Change in 2013
	€bn	€bn	€bn
X – M	39.6	38.5	-1.1
F	-31.3	-29.1	2.2
Net Transfers	-1.2	-1.3	-0.1
Balance on Current Account	7.3	8.2	0.9
as % of GNP	5.5	6.0	

National Accounts 2014

A: Expenditure on Gross National Product

	2013	2014	Change in 2014		
	€bn	€bn	Value	Price	Volume
Private Consumer Expenditure	83.5	85.4	2.3	0.8	1.5
Public Net Current Expenditure	25.5	25.3	-0.7	0.6	-1.3
Gross Fixed Capital Formation	18.2	19.6	7.6	3.0	4.5
Exports of Goods and Services	177.9	188.2	5.8	1.1	4.6
Physical Changes in Stocks	0.8	0.8			
Final Demand	305.9	319.3	4.4	1.1	3.2
less:					
Imports of Goods and Services (M)	139.3	146.9	5.5	1.5	3.9
Statistical Discrepancy	-1.4	-1.4			
GDP at Market Prices	165.2	171.1	3.6	0.9	2.7
Net Factor Payments (F)	-29.1	-30.2			
GNP at Market Prices	136.1	140.8	3.5	0.8	2.7

B: Gross National Product by Origin

	2013	2014	Change in 2014	
	€bn	€bn	€bn	%
Agriculture	3.0	3.0	0.1	2.5
Non-Agriculture: Wages, etc.	70.1	72.4	2.3	3.3
Other	58.2	60.6	2.4	4.1
Adjustments: Stock Appreciation	-0.1	-0.1		
Statistical Discrepancy	1.4	1.4		
Net Domestic Product	132.6	137.4	4.8	3.6
Net Factor Payments	-29.1	-30.2	-1.1	3.8
National Income	103.5	107.1	3.7	3.5
Depreciation	16.4	16.6	0.2	1.2
GNP at Factor Cost	119.9	123.7	3.9	3.2
Taxes less Subsidies	16.2	17.1	0.9	5.7
GNP at Market Prices	136.1	140.8	4.8	3.5

C: Balance of Payments on Current Account

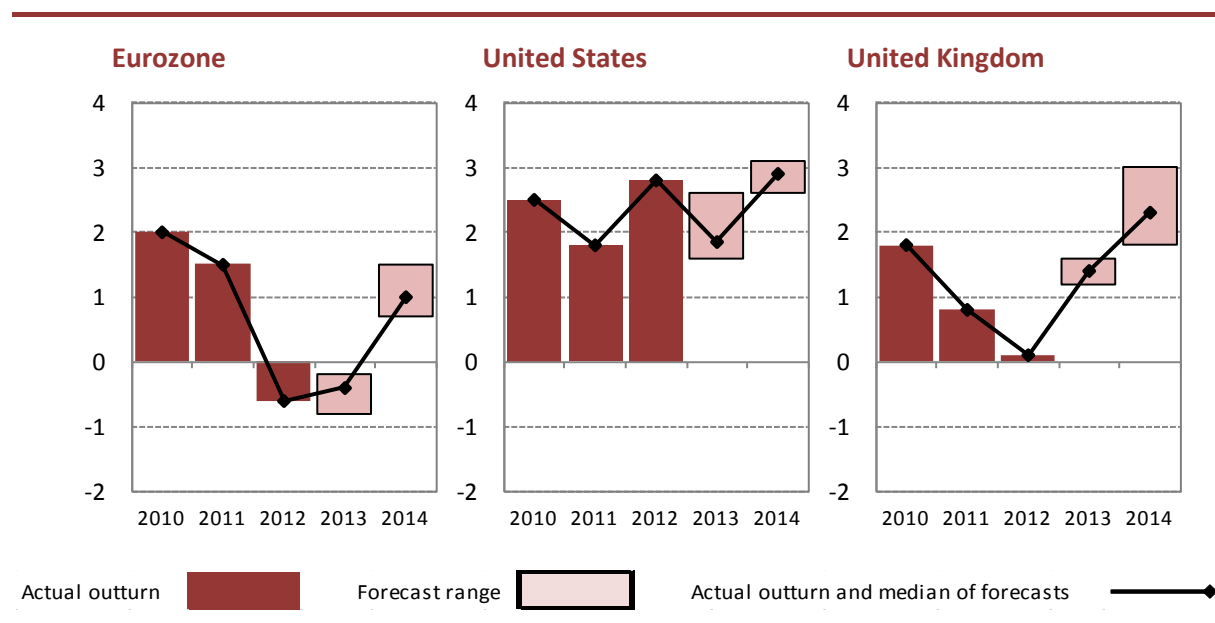
	2013	2014	Change in 2014
	€bn	€bn	€bn
X – M	38.5	41.2	2.7
F	-29.1	-30.2	-1.1
Net Transfers	-1.3	-1.3	0.0
Balance on Current Account	8.2	9.8	1.6
as % of GNP	6.04	6.98	

1

The International Economy

While economic conditions in the Eurozone, the United States and the United Kingdom remain challenging, there has been greater stability and reduced uncertainty evident in 2013 compared to recent years. The economies in the US and UK are estimated to have grown modestly between 1 and 2 per cent this year, with growth prospects for 2014 improving to between 2 and 3 per cent. The situation for the Eurozone remains much less favourable, however, with contraction likely this year and uncertainty surrounding the muted 1 per cent growth forecast for next year. Figure 1 summarises the range of growth forecasts for Ireland's main trading partners for the present forecast horizon.

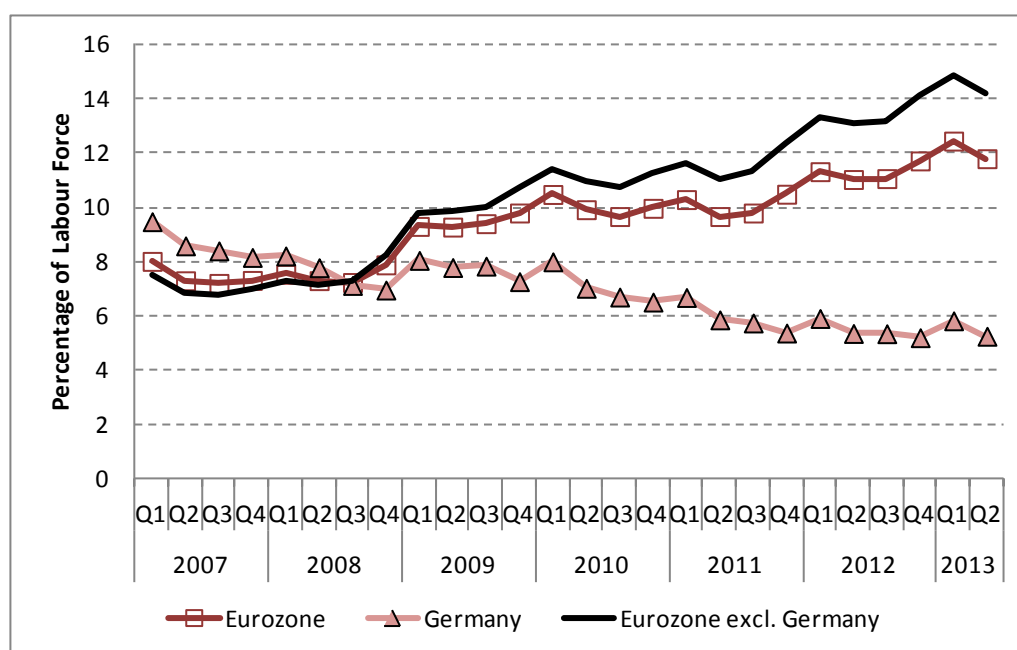
FIGURE 1 Real GDP Growth (% change, year-on-year)



Sources: FocusEconomics, Eurostat, IMF, OECD, HM Treasury and Federal Reserve.

The Eurozone Economy

Having spent six quarters mired in contraction, the Eurozone economy grew marginally in the second and third quarters of 2013. However, initial estimates showed a weak expansion of just 0.1 per cent in the third quarter, suggesting the expected pick-up in activity for the second half of 2013 may not be realised. The labour market situation in the Eurozone remains challenging and, as shown in Figure 2, the unemployment rate is considerably higher for the currency union excluding Germany.

FIGURE 2 Unemployment Rates, 2007 Q1 – 2013 Q2

Source: Eurostat, own calculations.

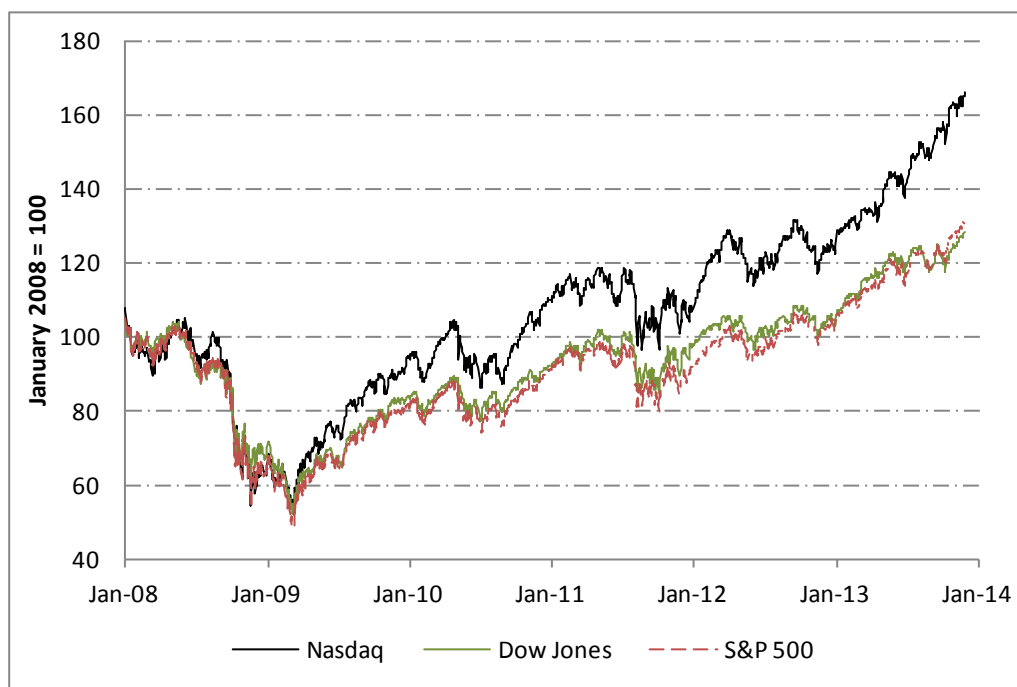
A number of key areas for reform remain for the currency union. Progress towards decoupling bank and sovereign debt has been hampered by disagreement among member states on detailed implementation since the policy was announced at the June 2012 European Summit. Lengthy negotiations for coalition formation in Germany have contributed to this inertia in the latter half of 2013. Agreement for the Single Supervisory Mechanism was reached in March, and has been followed in December by agreement on the rules for the Single Resolution Mechanism (SRM). The new system will come into force in 2016 and will see individual funds established for each member state, rather than a unified fund. The funds will be supplied through bank contributions and are planned to reach one per cent of a member state's covered deposits by 2025. The European Central Bank has planned an extensive assessment of systemically important Eurozone banks with risk assessment, asset quality review and stress testing expected before end-2014. Despite recent progress for the Eurozone, considerable uncertainty for recovery in growth remains, and if previous trends continue, there may be downward revisions in prospect for the Eurozone's 2014 growth forecast.

The US Economy

Despite the closure of its federal government for 16 days in October due to political gridlock, the US economy has strengthened in Quarter 4, 2013. Seasonally adjusted US non-farm payrolls continues to grow at a brisk pace, pushing closer to 137 million in November, the highest level of employment since

August 2008. Annual GDP growth picked up in the third quarter to 1.8 per cent, following revised estimates for the second quarter at 1.6 per cent and the first quarter at 1.3 per cent. Forecasts continue to predict GDP growth for 2013 of about 2 per cent, largely unaffected by the government shutdown, accelerating to just under 3 per cent in 2014. A bipartisan budgetary agreement reached in December will avoid spending cuts totalling \$60 billion previously scheduled for 2014 and 2015, but the issue of raising the debt ceiling remains unresolved.

FIGURE 3 Three key US Stock Indices, 2008 - Present



Sources: FRED Federal Reserve Bank of St Louis and Yahoo Finance.

There has been much speculation on the commencement of the withdrawal or 'taper' of quantitative easing in the US. Following a prolonged period without consensus about the interpretation of economic indicators, a clearer picture of economic recovery is now emerging. If members of the Federal Open Market Committee consider the recovery to be sustainable, in particular with regard to the unemployment rate, the \$85 billion per month in quantitative easing is expected to be gradually withdrawn. The term of office of the current Chairman of the Federal Reserve, Ben Bernanke, ends in January 2014. Janet Yellen is set to succeed Bernanke, pending Senate approval. Her nomination and confirmation process have thus far been positively received by investors.

Figure 3 charts three US stock indices since 2008. Nasdaq has recently reached a 13-year high above 4,000, up one-third since the beginning of 2012, whereas the

Dow Jones has surpassed 16,000 to reach an all-time high. However, it remains to be seen whether such gains will be sustained when monetary policy becomes less accommodative.

The UK Economy

Further improvements in the economy of the United Kingdom have been seen since the last *Commentary*. The Office for National Statistics (ONS) has estimated growth of 0.8 per cent in GDP in the third quarter, leaving the UK on course for growth of 1.5 per cent for the year. All of the main industrial groupings (agriculture, production, construction and services) showed growth over the period, with the largest rise coming from the employment-intensive construction sector. Services, the largest of these components, now exceeds its pre-crisis output peak.

The UK labour market has continued to improve in 2013. The addition of more than 175,000 jobs during the third quarter caused the employment rate to grow to 71.8 per cent from 71.2 per cent in the previous quarter. The unemployment rate fell by 0.2 percentage points to 7.6 per cent, which represents a four-year low. Improvements in labour force participation have also been observed. Growth in earnings, however, is lagging behind the growth in employment, and has not been keeping pace with inflation. Growth in the Consumer Price Index fell to 2.2 per cent year-on-year in October. This fall was in line with falls seen in the US and Eurozone. The fact that inflation in the UK is the highest in the 28 member states of the European Union, and twice the EU average, implies potential competitiveness losses for the UK. Inflation is, however, close to target. This may allow the Bank of England to continue its loose monetary policy to support the economic recovery.

In August of this year, the Bank of England issued “forward guidance” on the path of monetary policy. It suggested that it would leave the Bank Rate unchanged, at least until the unemployment rate had fallen below 7 per cent. This guidance also applied to its quantitative easing scheme. The Bank did not expect that the unemployment rate would reach that threshold until 2016, but it now seems likely to be achieved sooner.

The World Economy

The World Trade Organisation has recently forecasted better prospects for global merchandise trade in 2014 than in 2013. Of particular relevance to Ireland, developed-country imports are expected to grow by 3.2 per cent in 2014,

following a small contraction in 2013. If there is an expansion in world trade as a result of developments in major economies, the Irish economy can expect to benefit, given its open and highly trade-focused orientation. Of course, without a return to sustained growth in the economies of its main trading partners, the Irish economic situation is likely to be stagnant in the medium term, and various risk factors to world output remain at present, in particular the risks highlighted above to the Eurozone's recovery. Nonetheless, the improved sense of economic stability in 2013 has been a more conducive environment for consumers and businesses to assist economic recovery.

2

Exports of Goods and Services

As explained in previous *Commentaries*, the ending of the pharmaceutical ‘patent cliff’ is impacting on Ireland's trade statistics. Official statistics show that the value of Irish merchandise exports was down by €4.8 billion in the first ten months of the year when compared to the same period in 2012. Much of this occurred in the exports of chemicals and related products, down by €4.1 billion in value over the same period. Taking account of these factors and the international environment outlined earlier, it seems likely that merchandise exports will have fallen by about 3.9 per cent in volume and by about 4.1 per cent in value in 2013, broadly in line with our previous forecast.

The *Quarterly National Accounts* show that services exports continue to exceed service imports, see Figure 4. On the basis of available data, it seems likely that there was a substantial increase in earnings from tourism in 2013, rising by 5 per cent. A number of factors have contributed to this increase, the improvements in the US and UK economy, as well as *The Gathering* initiative by Tourism Ireland. With regard to other services exports, output data suggest that the sector has

FIGURE 4 Exports and Imports of Goods and Services, Constant Prices



been performing well over the course of the year. We anticipate that other services export growth should be over 4 per cent this year. On the basis of these forecasts we expect that overall exports of goods and services will grow by 0.3 per cent this year. The price deflator for exports looks likely to be moderate this year at just 0.4 per cent, and so the value of exports is estimated to have increased by just 0.7 per cent in 2013.

Looking forward into 2014, we remain hopeful that the long-awaited recovery in the Eurozone economy takes place. Short-term forecasting institutes across Europe expect that world trade growth will increase in 2014 to an annual rate of 4.4 per cent. Also the effects of the ending of the patent for the drug Lipitor on trade data will have fully played out. Thus, we are forecasting some recovery, albeit moderate, in measured merchandise exports, with growth in volume terms of 2 per cent (Table 1). Tourism receipts may show some slowdown in growth to around 4 per cent following the ending of *The Gathering*, but we anticipate that other services exports will continue to drive Irish export growth. On the basis of trends in this sector and service-sector FDI coming on stream, we anticipate that export growth for this sector will be around 7 per cent next year. Taking these forecasts into account, total exports could increase by 4.6 per cent in 2014 in real terms and by 5.8 per cent in value, implying an export price deflator next year of just over 1 per cent.

TABLE 1 Exports of Goods and Services

	2011	2011	2012	2013	2014
	Value	Volume Change			
	€ billion	%	%	%	%
Merchandise	85.0	3.8	-3.6	-3.9	2.0
Services:					
Tourism	3.0	-4.8	-0.2	5.0	4.0
Other Services	78.5	7.6	7.2	4.1	7.0
Total Services	81.5	7.0	6.9	4.1	6.9
Exports of Goods and Services	167.0	5.4	1.6	0.3	4.6

Sources: Central Statistics Office and ESRI Forecasts.

3

Investment

It seems likely that the volume of investment has increased in 2013. While the growth looks set to be moderate, this is the first time that we will have seen an increase in this sector since 2007. However, underneath this overall improvement the various components of investment are displaying quite different trends.

Available indicators suggest that the investment in residential housing remains subdued. It seems likely that housing completions will be approximately 8,200 this year, a decline on 2012. While the number of completions is expected to rise in 2014 the increase will not be large in absolute terms, so the issue of a housing supply constraint is likely to remain a factor in the market over the short term at least.

The low level of supply is contributing to the strong growth in house prices in the Dublin region. In contrast, house prices outside Dublin have remained weak. The Private Residential Tenancies Board (PRTB)/ESRI Rent Index for Quarter 3, 2013 shows a similar picture for the rental market. At the moment we do not view the strength of the Dublin market as the re-emergence of a bubble. The current increases from a low base are taking place after a period of a substantial decline in prices, and the number of transactions remains far below its long-run average. In addition, mortgage drawdowns remain subdued, suggesting the price increases have not been driven by credit growth. As the housing market recovers there may be periods of sharp increases in prices over a short period.

Investment in other building and construction looks likely to have grown this year. Thus, we are forecasting that overall building and construction investment has grown by 2.5 per cent in volume this year and will grow by 6.3 per cent in 2014 (Table 2).

Low interest rates, high company savings and the expectation of an improvement in economic prospects, along with the need to undertake previously deferred investment, means that we are expecting the volume of investment in machinery and equipment to increase this year by 1.7 per cent and by 2.4 per cent in 2014.

On the basis of these forecasts, we expect that total investment should rise by 2.1 per cent in real terms in 2013 and by 4.5 per cent in 2014.

TABLE 2 Gross Fixed Capital Formation, % Change in Volume

	2011	2011	2012	2013	2014
	Value	Volume Change			
	€ billion	%	%	%	%
Housing	3.8	-20.5	-21.4	0.0	13.5
Other Building	5.1	-14.8	7.2	3.1	2.0
Total Building and Construction	9.3	-16.2	-4.1	2.5	6.3
Machinery and Equipment	8.0	-0.9	2.6	1.7	2.4
Total	17.3	-9.5	-1.0	2.1	4.5

Source: Central Statistics Office and ESRI Forecasts.

4

Prices, Consumption and Incomes

Prices

Inflation rates in the United States, Eurozone and United Kingdom, at 1.0 per cent, 0.9 per cent and 2.2 per cent respectively, are the lowest seen since late-2009. Low and falling inflation appears widespread, prompting fears of deflation. The European Central Bank (ECB) has admitted that the Eurozone may face “a prolonged period of low inflation.” The ECB offered forward guidance in July that interest rates would remain at present or lower levels for an extended period of time. Furthermore, the main refinancing rate was cut in October from 0.5 per cent to 0.25 per cent, reflecting the need to act on the divergence of Eurozone inflation from the target of just under 2 per cent.

Energy prices are a significant driver of the falls in inflation. The United States Energy Information Administration (EIA) forecast in November the price per barrel of Brent Crude oil to fall 2.75 per cent to \$106 in December. It further forecast an average price of \$103 for 2014. The EIA points to growth in non-OPEC supply of oil, which is outstripping the growth in worldwide consumption, as a cause of the fall in prices. A recent deal between Iran and several world powers regarding its nuclear programme holds the potential to lower oil prices further. Sanctions introduced against Iran in 2012 cut its petroleum exports by up to 60 per cent. The removal of these sanctions should see world oil supply increase as Iran returns to higher output levels.

TABLE 3 Inflation Measures

	2011	2012	2013	2014
	Annual Change			
	%	%	%	%
CPI	2.6	1.7	0.5	0.8
Personal Consumption Deflator	1.8	0.6	0.7	0.8
HICP	1.1	2.0	0.6	0.7

Sources: Central Statistics Office and ESRI Forecasts.

The Consumer Price Index (CPI) and Harmonised Index of Consumer Prices (HICP) for Ireland both show an annual inflation rate of 0.3 per cent in the 12 months to November. This absence of inflation provides some support to real wages and

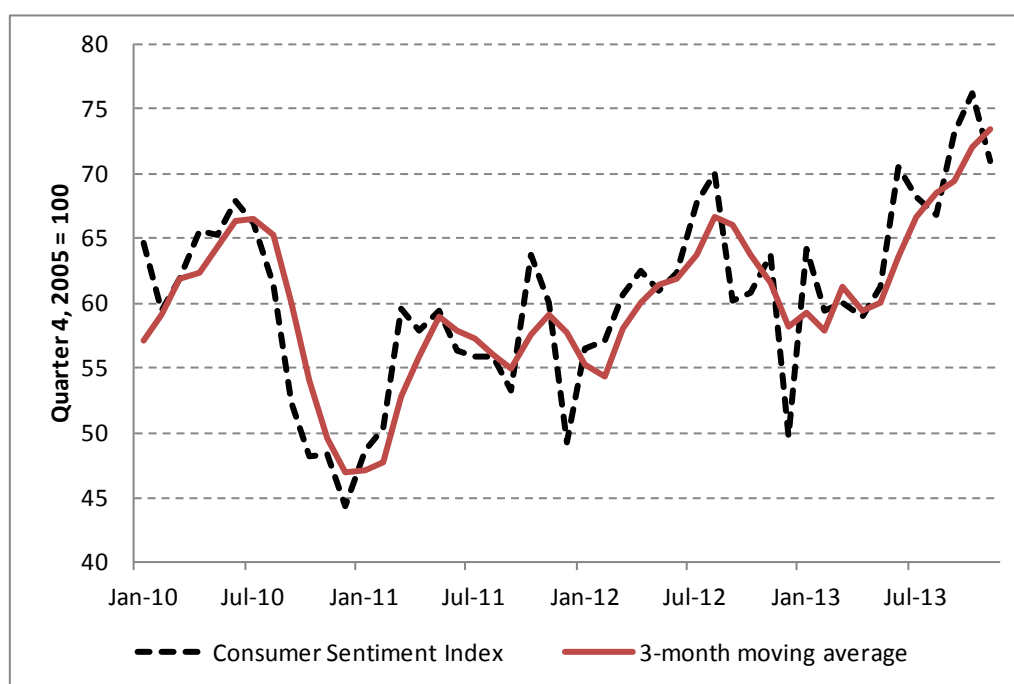
consumption. The forecasts for the CPI, the HICP and the personal consumption deflator are included in Table 3. They highlight likely continuing low inflation in 2014.

Consumption

The KBC Ireland/ESRI *Consumer Sentiment Index* compiles indices based on the individual's assessment of their current, past and future financial standing and how they view the outlook for the economy and unemployment, for instance. The responses are used to produce an overall index of sentiment. The Consumer Sentiment Index has been strengthening for much of 2013, as shown in Figure 5. Although the monthly index declined from October's five-year high, the trend of the index (represented by the 3-month moving average) increased for seven consecutive months to November.

Retail sales have remained relatively weak in 2013. The most recent monthly figures (October) show a volume fall of 1.6 per cent for retail sales (excluding the motor trades) with respect to the same month in 2012. The digital TV switchover took place in October 2012, however, and the elevated sales of electrical goods in that month pushed up the Retail Sales Index. Retail sales (excluding motor trades) are slightly higher in volume for the year-to-date with respect to the same period in 2012. While new vehicle registrations have fallen by 2.3 per cent in 2013, growth of 45 per cent in the registration of second-hand vehicles has caused the overall volume of vehicle registrations to increase by 12.4 per cent.

Data from the second quarter of 2013 show that household debt continued to decline, as did the ratio of household debt to gross disposable income. The latter is an indicator of debt sustainability. Household debt fell by €1.6 billion to €170 billion. This deleveraging continued a trend from the fourth quarter of 2008, as discussed in the last *Commentary*. Debt to gross disposable income also fell in the second quarter of this year, with gross disposable income growing by €945 million to €21.4 billion. We expect that both debt and the ratio of debt to gross disposable income will continue to fall in 2014, due to a rising wage bill and continued deleveraging.

FIGURE 5 Consumer Sentiment

Sources: ESRI/KBC Ireland.

Nationwide UK (Ireland) Savings Index data (produced by the ESRI) show that the share of respondents whose first preference is to spend any surplus money (in excess of their everyday needs) exceeded 10 per cent in the first 11 months of 2013. This share was 8.4 per cent in 2012. In addition, there was a small decline in the share whose first preference for surplus money is to pay down debt, from 51 per cent in 2012 to 48.2 per cent for the first 11 months of 2013. There may be a moderation in the pace of deleveraging should this pattern continue in 2014.

Incomes

As discussed in Chapter 6 of this *Commentary*, the CSO's *Quarterly National Household Survey* showed robust employment growth and a fall in unemployment during the third quarter. This continued a trend seen since the fourth quarter of 2012, with 3.2 per cent annual employment growth. It is our view that employment will continue to grow at a strong pace in 2014. The *Earnings, Hours and Employment Costs Survey* shows that average weekly earnings fell by 2.9 per cent in the third quarter, having grown slightly in the previous two quarters. Average hourly earnings fell by 1.8 per cent year-on-year in the third quarter. An important factor in the fall in hourly earnings was the effect of the Haddington Road Agreement on the public sector. Hourly earnings in the private sector were largely unchanged.

As discussed in Box 1, the educational attainment of the employed population has changed considerably over the last year. Employment of graduates is rising rapidly while employment of those with less than a leaving certificate is falling. Because those with higher levels of educational attainment typically earn more than those with lesser qualifications, this change in the educational composition of those employed will tend to raise average earnings for the economy as a whole.

For 2013 we estimate that this will add over 0.5 percentage points to average earnings and a similar amount in 2014. Allowing for some limited rise in weekly earnings in the last quarter of 2013 and in 2014, we expect average earnings at the level of the economy to rise by around 1 per cent in 2013 and by 1.4 per cent in 2014. This analysis informs our view of growth in wages and gross personal income (reported in billions of Euro in Table 4). Total income received is forecast to grow by 4.8 per cent in 2014.

The improving labour market also impacts on our forecasts of current transfers and direct personal taxation. Transfers are forecast to fall by 3 per cent to €23.6 billion, with taxes to increase to €26.2 billion, up 7.7 per cent. Furthermore, the average tax rate is forecast to rise to 22.1 per cent in 2014. Consumption is forecast to rise in 2014 by 2.3 per cent in value to €85.4 billion. The savings ratio is likely to fall moderately in 2014, as shown in Table 4.

TABLE 4 **Personal Disposable Income**

	2011	2012	2013	2014
	€bn	€bn	€bn	€bn
Agriculture etc.	3.2	2.9	3.0	3.0
Non-Agricultural Wages	68.3	68.4	70.1	72.4
Other Non-Agricultural Income	13.3	15.9	17.4	19.4
Total Income Received	84.7	87.1	90.4	94.8
Current Transfers	25.3	25.0	24.4	23.6
Gross Personal Income	110.0	112.2	114.8	118.4
Direct Personal Taxes	22.6	23.1	24.3	26.2
Personal Disposable Income	87.4	89.1	90.5	92.2
Consumption	82.4	82.6	83.5	85.4
Personal Savings	5.0	6.5	7.0	6.8
Savings Ratio	5.8	7.3	7.7	7.4
Average Tax Rate (%)	20.5	20.6	21.2	22.1

Sources: Central Statistics Office and ESRI Forecasts.

5

Public Finances

The exchequer returns to end-November show that tax revenue has grown by 4.2 per cent for the year to date. Income tax revenue, including USC, increased by 4.4 per cent, VAT rose by 2.8 per cent, while excise revenue was 6.8 per cent higher. Net expenditure was 4.4 per cent lower, with current expenditure down by 4.1 per cent and capital expenditure 9.3 per cent lower.

Based on the exchequer returns, it is likely that the general government deficit in 2013 will be just over 7 per cent of GDP (Table 5), down substantially from the final deficit of 8.2 per cent in 2012 and well within the target of 7.5 per cent. This represents a significant improvement in the underlying position as 2013 has seen a reduction in charges to the banks for the guarantee amounting to almost €500 million and an additional one-off charge of over €1 billion relating to the winding up of the Irish Bank Resolution Corporation (IBRC). While concerns continue about expenditure levels in health exceeding budget, the indications from the exchequer returns are that some revenue heads will out-perform their targets.

TABLE 5 Public Finances

	2012	2013	2013	2014	2014
	€bn	€bn	% change	€bn	% change
Income					
Taxes on income incl. Social insurance	27.3	28.7	5.2	30.6	6.6
Taxes on expenditure	18.0	18.7	3.6	19.6	4.8
Gross trading and investment income	3.0	3.4	13.5	3.0	-11.5
Other Income	3.9	3.4	-13.0	3.3	-0.9
Total receipts : Current	52.2	54.2	3.8	56.5	4.4
Total receipts : Capital	1.4	1.4	3.2	1.4	-0.7
Total receipts - current and capital	53.6	55.6	3.7	57.9	4.3
Expenditure					
Subsidies	1.5	1.3	-14.3	1.3	-1.5
National debt interest	5.9	7.6	27.7	7.8	3.6
Transfer payments	27.5	26.9	-2.2	26.2	-2.7
Expenditure on Goods and Services	26.9	26.8	-0.4	26.6	-0.7
Total expenditure - current	61.9	62.6	1.1	61.9	-1.1
Total expenditure - capital	5.0	4.7	-5.7	3.6	-22.6
Total expenditure - current and capital	66.8	67.3	0.6	65.5	-2.6
General Govt. Balance	-13.5	-11.7		-7.6	
As % of GDP	-8.2	-7.1		-4.4	

As we have argued previously, our preference was that the full planned consolidation of €3.1 billion be implemented as part of Budget 2014. In the end, Budget measures were in the order of €2.5 billion. Despite the reduced budgetary measures, we still expect that the general government deficit will amount to 4.4 per cent of GDP in 2014, well within the target of 5.1 per cent.

6

The Labour Market

Since the fourth quarter of 2012, there has been a continuous expansion of employment and reduction in unemployment in Ireland. Improvements have also been evident in the participation rate and the resulting expansion of the labour force. Although substantial net outward migration is expected to continue, the improvement in labour market conditions remains the most concrete evidence of recovering economic activity at present. By this measure, the pace of the recovery has been accelerating over the past year. The *Live Register* total has been falling steadily since August 2012, while annual employment growth has risen from 0.1 per cent for Quarter 4, 2012 to 3.2 per cent in Quarter 3, 2013.

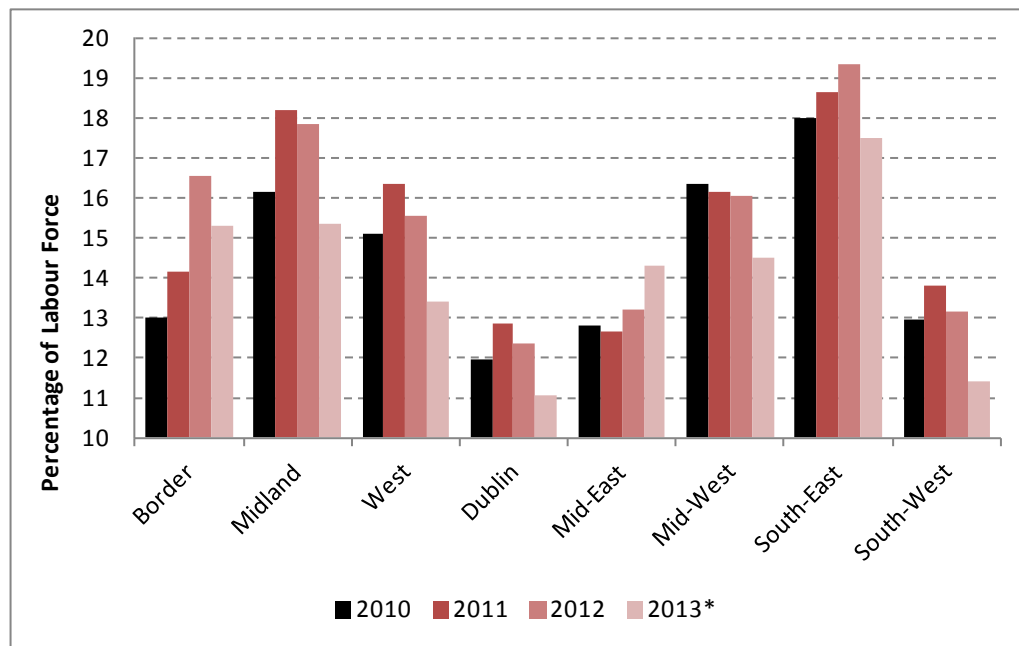
The latest *Quarterly National Household Survey* (QNHS) reports employment growth outstripping the reduction in unemployment. In the third quarter of 2013 there was a seasonally adjusted quarterly increase of 22,500 for total employment, compared to a decrease in unemployment of 18,000. From a peak of 15.1 per cent in early 2012, the standardised unemployment rate is currently at 12.5 per cent.

By sector, the range of expansion in employment appears to be broadening. There were 10 sectors showing quarterly employment growth in the third quarter of 2013, and the largest increase was reported for agriculture, forestry and fishing. As discussed in earlier *Commentaries* from this year, much of this sector's growth is thought to be the result of *Census*-related adjustments to the QNHS. (While caution is warranted in analysing the sectoral composition of employment as reported in the QNHS results, the same uncertainty does not apply to aggregate employment. Thus the growth in employment in other sectors is likely to be underestimated in the QNHS.) However, there have been encouraging developments in the primary sector during the year, with prospects improving for Irish dairy and beef exports thanks to EU and international policy changes. Other areas with growing employment include professional, scientific and technical activities, administrative and support services activities, and accommodation and food service activities.

As shown in Figure 6, there has been an annual fall in unemployment rates across all regions, with the exception of the Mid-East. While emigration could be the cause for many of the other regions' reductions, it is likely that the large

decreases are employment-related in Dublin, the West and the South-West. Figure 7 charts the annual change in youth employment (for those aged 15-24 years). This turned positive in the third quarter of 2013, the first such increase since the final quarter of 2007. From a peak of one in three, the youth unemployment rate has fallen to 26.5 per cent. Much of this reduction is probably due to increased educational participation.

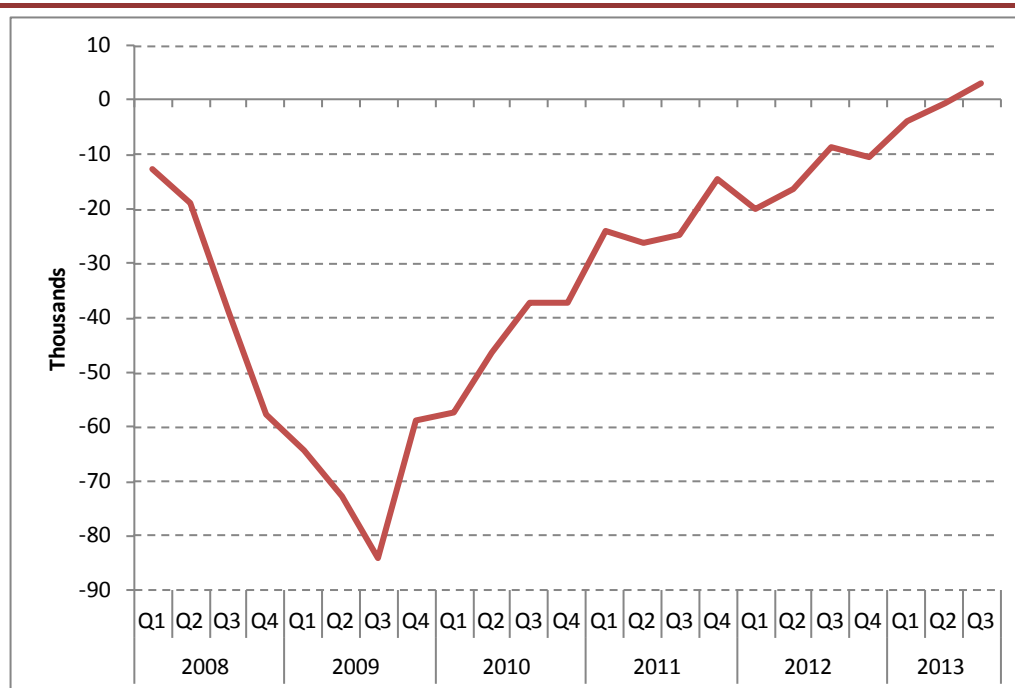
FIGURE 6 Unemployment Rates by Region



Source: Central Statistics Office, Quarterly National Household Survey.

* Annual average assuming no change for Q4 compared to Q3.

With improving momentum in the labour market, we now forecast the rate of unemployment to fall to 12 per cent for 2014, down from 13.1 per cent on average for 2013. The labour force is expected to accelerate its growth in 2014. Unemployment, having fallen below 300,000 in 2013 will then continue to decrease to 261,000 in 2014. The increases in employment this year are expected to be repeated in 2014, with the total at work expected to reach 1.92 million from 1.88 million in 2013. The broad sectoral breakdown of the employment forecasts are shown in Table 6.

FIGURE 7 Annual Change in Youth Employment

Source: Central Statistics Office, Quarterly National Household Survey.

TABLE 6 Employment and Unemployment

	Annual Averages, 000s			
	2011	2012	2013	2014
Agriculture	83	86	105	111
Industry	348	336	344	357
of which: Construction	108	102	103	106
Services	1,414	1,415	1,434	1,454
Total at work	1,849	1,839	1,884	1,923
Employment Growth Rate, %	-1.8	-0.5	2.5	2.0
Unemployed	317	316	283	261
Labour Force	2,166	2,154	2,162	2,178
Unemployment Rate, %	14.6	14.7	13.1	12.0
Participation Rate, %	60.2	59.9	60.2	60.8
Net Migration	-27	-34	-33	-26

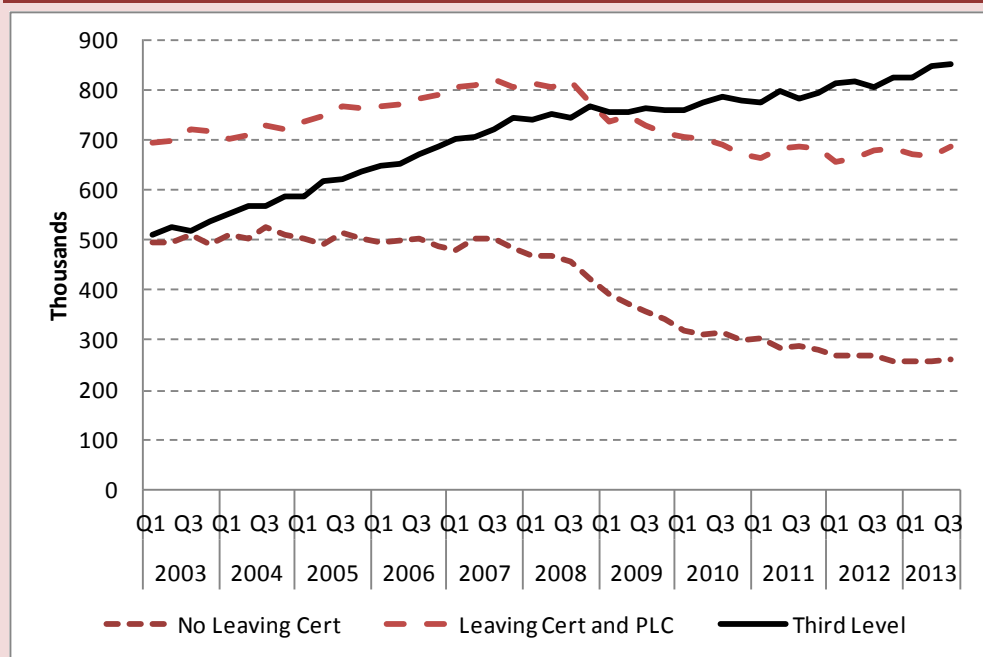
Source: Central Statistics Office and ESRI Forecasts.

Box 1: Educational Attainment and the Labour Market

by John FitzGerald

Between the peak of the boom at the end of 2007 and the low point early in 2012, total employment fell by around 16 per cent. Today, total employment stands about 13 per cent below the peak. However, the pattern of change has been very different depending on the educational qualifications of labour market participants.

Figure B.1 shows employment by three levels of education: lower than Leaving Certificate, Leaving Certificate and Post-Leaving Certificates, and third level. In spite of the huge fall in output, employment of graduates has continued to rise throughout the crisis period. Today, the number of people employed who have third-level qualifications is one-eighth higher than it was at the peak of the boom. While the rate of growth of this category of employment has been slower than before the crisis it has, nonetheless, continued at a robust rate throughout the last six years.

FIGURE B.1 Employment by Level of Education

Source: Central Statistics Office, Quarterly National Household Survey.

The picture is very different for employment of those who do not have a Leaving Certificate. As shown in Figure B.1, today employment of those with the least advanced educational qualifications is little over half what it was in 2007. The fall in employment among this category of workers began in 2007 and has continued up to the present. Employment of those with a Leaving Certificate is also down substantially on the 2007 peak – by around 20 per cent. However, the pattern is rather different from those without a Leaving Certificate, the most rapid fall

occurred in 2009 and it then stabilised so that employment today is similar to what it was in 2010. Clearly the factors driving this category of employment are more complex than in the case of the no qualifications category.

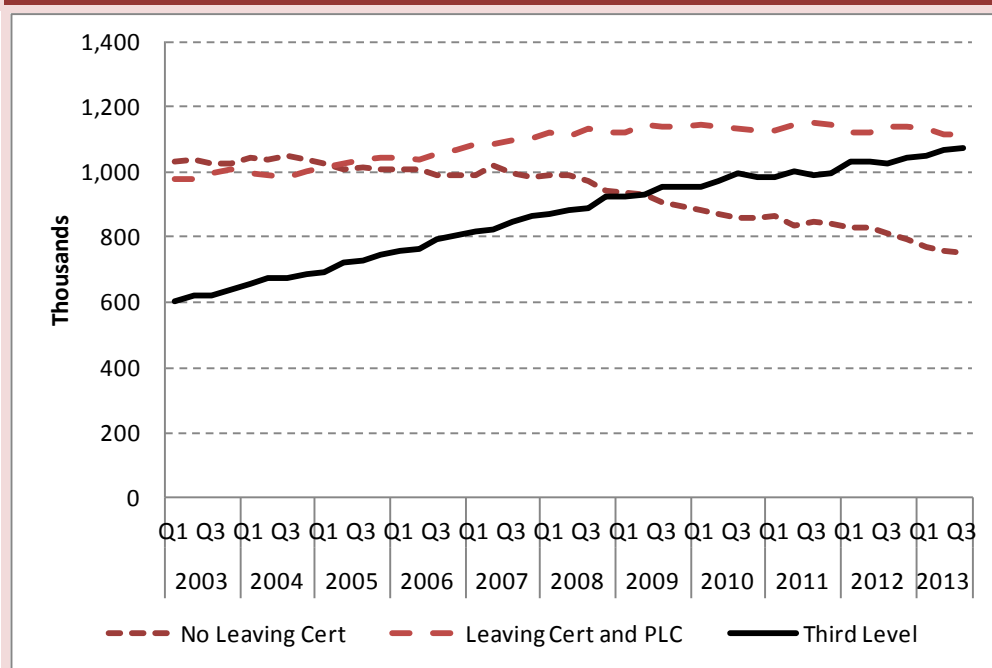
This pattern of change among those with more limited qualifications is not that surprising, given the fact that the building and construction sector has carried the brunt of the fall in employment. Traditionally, those employed in the sector have had more limited educational qualifications than those employed elsewhere in the economy. However, what is more surprising is that the employment of those with third level qualifications has risen continuously throughout the crisis.

Between the peak in 2007 and the latest quarter in 2013, employment of graduates grew by an average of 2.8 per cent a year. (Between 2002 and 2007 it grew by over 8 per cent a year.) This highlights the fact that much of the tradable sector of the economy employing graduates survived the crisis in a reasonably robust state and this is reflected in the signs of economic recovery today. Over the last year growth in graduate employment has returned to 5.3 per cent. It is also notable that the sector of the economy which has traditionally had the highest share of graduate employment has been the public sector. However, over the course of the six years employment in that sector has fallen steadily as a result of the need for fiscal adjustment. That means that the growth in private sector employment of graduates has been particularly robust.

The data published in the *QNHS* on the population aged 15-64 by level of education also provides interesting evidence consistent with the differential pattern of the change in employment (see Figure B.2). Between the peak of the boom in late 2007 and Quarter 3, 2013 the population aged 15-64 with less than a Leaving Certificate fell by 17 per cent. However, the ESRI's Demographic Model would suggest that with no net migration the population with no leaving cert would have fallen by only 10 per cent over that period.¹ This would suggest substantial emigration among this group of the population. This would be a reversal of the pattern of emigration since the mid-1980s, where migration tended to be concentrated among those with the highest level of educational qualifications (Fahey, FitzGerald and Maître, 1997)². However, the explanation may lie in the fact that the major job losses occurred among those in the building industry, traditionally a sector with a mobile population. It was the sector with one of the highest shares of non-Irish workers in 2007.

¹ The model takes account of the ageing of the population. As the older cohorts retire and are replaced by younger better educated cohorts there is a natural process leading to a reduction in the population with no qualifications. Similarly, with no migration, the ageing process will see a rise in the share of graduates in the population.

² Fahey, T. J. FitzGerald, and B. Maître, 1997, "The Economic and Social Implications of Demographic Change", *Journal of the Statistical and Social Inquiry Society of Ireland* Vol 27 Part 5

FIGURE B.2 Population Aged 15-64 by Level of Education

Source: Central Statistics Office, Quarterly National Household Survey.

Over the period 2007-13 the observed change in the population with a Leaving Cert. was close to what would have been suggested by the ESRI's Demographic Model – suggesting little net migration among this cohort of the population. Finally, in the absence of net migration, the Demographic Model would suggest a growth in the population with third-level qualifications over the same period of over 10 per cent. In fact, that population rose by 22 per cent over the six years. This would suggest substantial net immigration of graduates over the crisis period.

The implications of the changing pattern of employment growth for 2014 and 2015 are positive. The rapid growth in graduate employment, already seen in the year to Quarter 3, 2013 is likely to continue. However, it can also be anticipated that, with some recovery in the building and construction sector, there may be a return to growth in employment in those with a Leaving Certificate or lesser qualifications. These developments would also be likely to reduce the level of net emigration in the coming years.

7

Imports and the Balance of Payments

Imports

The value of merchandise imports was close to 2 per cent lower in the first nine months of 2013 than in the corresponding period of 2012. Imports of capital goods and goods for consumption were weaker, although in the case of consumption goods the decline was marginal, while imports of intermediate goods grew. On the assumption that these trends continue over the closing months of the year we estimate that merchandise imports will be marginally lower, declining by 1.0 per cent in 2013 in volume terms. With merchandise import prices showing a moderate increase on 2013 the value of merchandise imports is likely to have weakened by about 0.7 per cent this year.

Based on available indicators, it seems likely that tourism spending overseas increased moderately in 2013 following a number of years of decline. Other service imports, which include royalty payments, grew in the first half of the year, and are estimated to have risen by 2 per cent in volume in the year as a whole. Thus, imports of goods and services are estimated to have increased by just under 1 per cent in volume and by 1.7 per cent in value in 2013, as shown in Table 7.

TABLE 7 Imports of Goods and Services

	2011	2011	2012	2013	2014
	Value	Volume Change			
	€billion	%	%	%	%
Merchandise	48.3	-2.4	-2.9	-1.0	2.3
Services					
Tourism	4.8	-11.2	-7.1	0.5	1.1
Other Services	78.4	1.7	2.3	2.0	5.0
Total Services	83.5	0.8	1.7	1.9	4.8
Imports of Goods and Services	131.8	-0.4	0.0	0.9	3.9

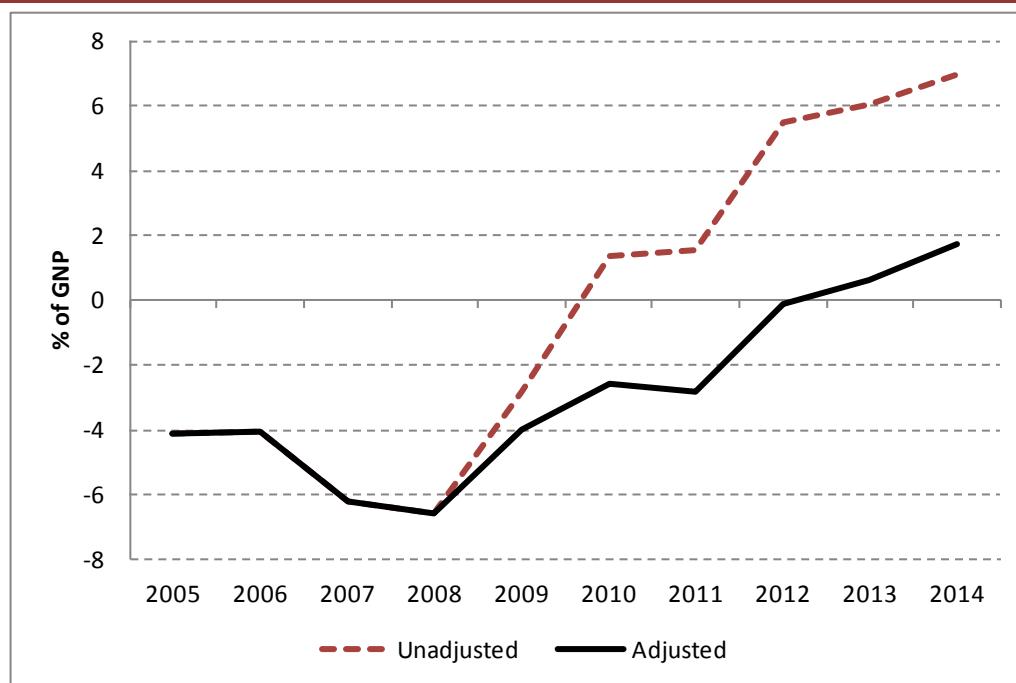
Taking account of our forecasts for investment and for growth in personal consumption and output in 2014, we expect that merchandise imports will grow by 2.3 per cent in volume terms. With average import prices likely to be marginally higher next year the value of merchandise imports will increase by 3.3 per cent. Tourism spending abroad is expected to increase more rapidly than in 2013. With growth in final demand expected to rise in 2014, we are expecting the growth in other service imports will also increase. Thus, imports of goods and

services are forecast to grow by 3.9 per cent in volume terms in 2014 and by 5.5 per cent in value.

Balance of Payments

Our estimated values of exports and imports show that the merchandise trade balance is likely to have fallen by close to 9 per cent, while the trade balance for services has risen in 2013. Both of these movements reflect the impact of the pharmaceutical ‘patent cliff’ on the value of Ireland’s trade as discussed in the previous *Commentary* and FitzGerald (2013) and in Dalton and Enright (2013). Thus, the surplus on total trade in goods and services is estimated to have fallen by close to €1 billion in 2013 to €38.5 billion. The impact of the ‘patent cliff’ means that we expect net factor flows to be lower in 2013 than in 2012, amounting to €28.9 billion reflecting lower pharmaceutical sector profits. These net outflows are forecast to increase to €30 billion in 2014. Despite this growth, the level is expected to remain lower than the level in 2012. When our forecasts for current transfers are included we are forecasting that the current account surplus will be €8.3 billion in 2013, the equivalent of 5 per cent of GDP and rise to 5.8 per cent of GDP in 2014, approximately €10 billion. Taking account of the impact of redomiciled plc’s reduces the current account surplus, although it remains positive, Figure 8.³

FIGURE 8 Current Account of the Balance of Payments, Adjusted for Re-domiciled PLCs



Source: Central Statistics Office and FitzGerald (2013).

³ See FitzGerald, J. (2013) “The Effect of Redomiciled Plcs on GNP and the Irish Balance of Payments”, Dublin: The Economic and Social Research Institute. Research Note 2013/1/2.

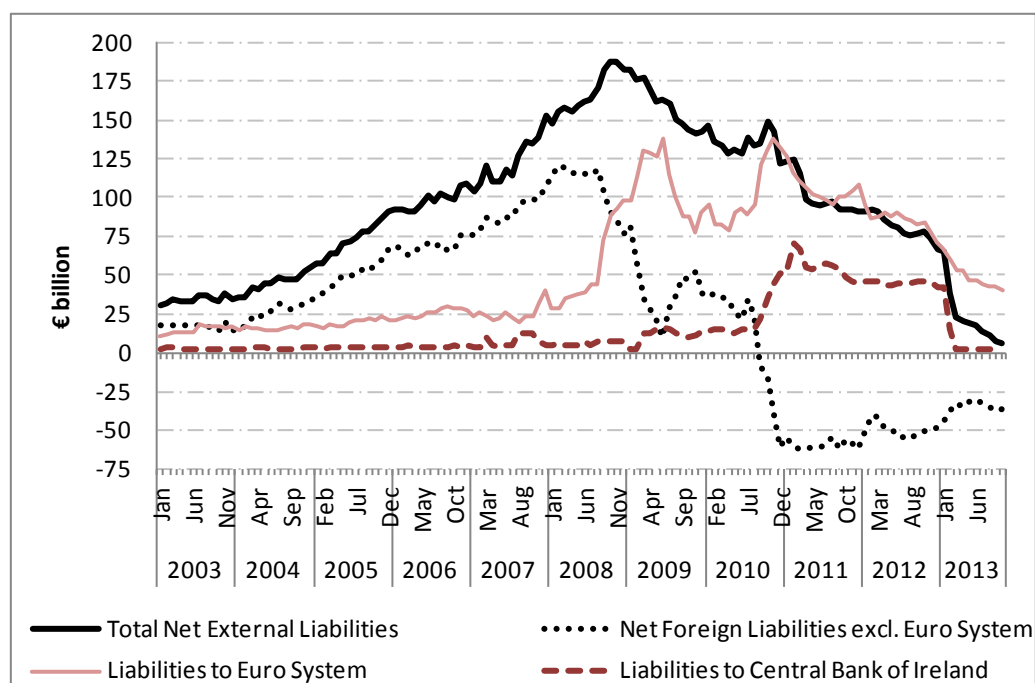
8

Monetary Sector Developments

Bank Funding

The funding situation of the Irish banking sector has continued to improve over the course of 2013. A reduced sense of uncertainty has prevailed since the latter half of 2012, when a number of key developments took place assisting the stability of the Eurozone. Following decisive action by the European Central Bank (ECB) to restore confidence and financial stability for the Eurozone (discussed in previous *Commentaries*), there has been an improvement in the funding profile for the Irish banking sector, with broadly growing deposits and falling reliance on Euro System lending. Figure 9 shows that the borrowing from the Euro System has declined consistently since 2010. At the current pace of decline, it may return to pre-crisis levels in 2014. The restructuring of the promissory notes and Exceptional Liquidity Assistance (ELA) have accelerated the reduction in the banking system's Total Net External Liabilities, the sum of the Net Foreign Liability and the liabilities to the Central Bank and Euro System. This is now close to balance.

FIGURE 9 Net Foreign Liabilities of the Banking System, January 2003 – October 2013



Source: Central Bank of Ireland, Money and Bank Statistics.

Note: ELA relating to the promissory notes was withdrawn following the restructuring transaction in February 2013.

Adjusting for non-transaction related effects (including revaluations and exchange rate movements), household deposits have decreased by just under €400 million in the first ten months of 2013, while NFC deposits have increased by €1.9 billion. Despite the modest decrease in household deposits for the year to date, this represents a broad stabilisation compared to previous years. The weighted average of interest rates offered by banks to attract term deposits has fallen steadily since mid-2012, and currently lies below the comparable Eurozone rate; this trend has been supportive to improvements in bank net interest margins.

Meanwhile, encouraging developments during 2013 for the two pillar Irish banks have improved their ability to attract investor funding at more favourable interest rates. For Bank of Ireland, the €1 billion State-held contingent convertible bond was successfully sold in January, and during the year several covered bond issuances have taken place. In December, €1.8 billion in State-held preference shares were repaid to the Exchequer, partly funded by €537 million in newly issued ordinary shares. Elsewhere, AIB floated €500 million in 3.5-year Asset-Covered Securities (ACS) in January, and in September issued €500 million in covered bonds with five-year maturity. A further €500 million in term funding secured by credit card receivables was raised in November. More recently, €500 million in senior unsecured debt was issued, the first unguaranteed re-entry into wholesale funding markets since 2009.

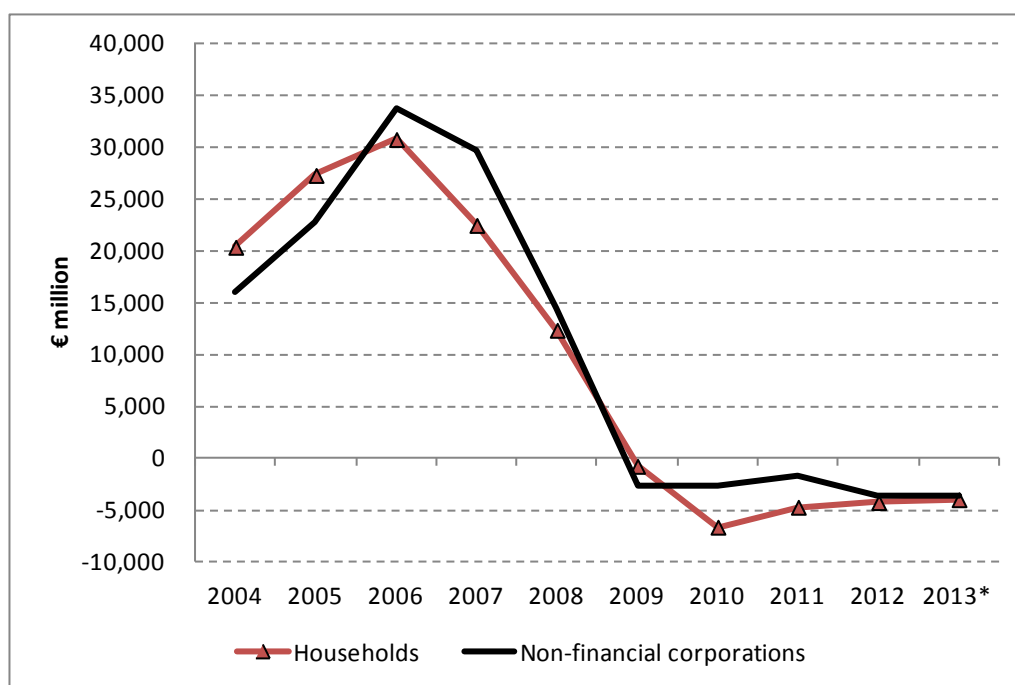
These positive funding developments notwithstanding, the position of the banking sector in Ireland remains challenging on a number of fronts. Still-rising levels of long-term mortgage arrears (discussed further below in Bank Lending), and the possibility that further capital injections might possibly be required in the future, present difficulties as the sector attempts to recover profitability. The outcome of the ECB's stress testing in 2014 will ultimately determine the extent to which Irish banks may require additional capital. The preliminary results of the asset quality review by the Central Bank of Ireland (CBI) were disclosed, with varying degrees of detail, in early December. As a result of this preliminary review, each of the banks under scrutiny require additional provisions for losses.

Bank Lending

Lending figures published monthly by the CBI show ongoing reduction during 2013, with the pace of deleveraging similar to that seen in recent years. For households and NFCs, loan drawdowns were more than offset by loan repayments by €7.6 billion in the first ten months of the year (adjusting for non-transaction related effects). As displayed in Figure 10, net lending has been subdued for each of the past five years. However, previous research by O'Toole *et*

al. (2013)⁴ has highlighted the sectoral variance in lending patterns, and there may be a rising tendency by SMEs to source non-bank financing to boost capital.

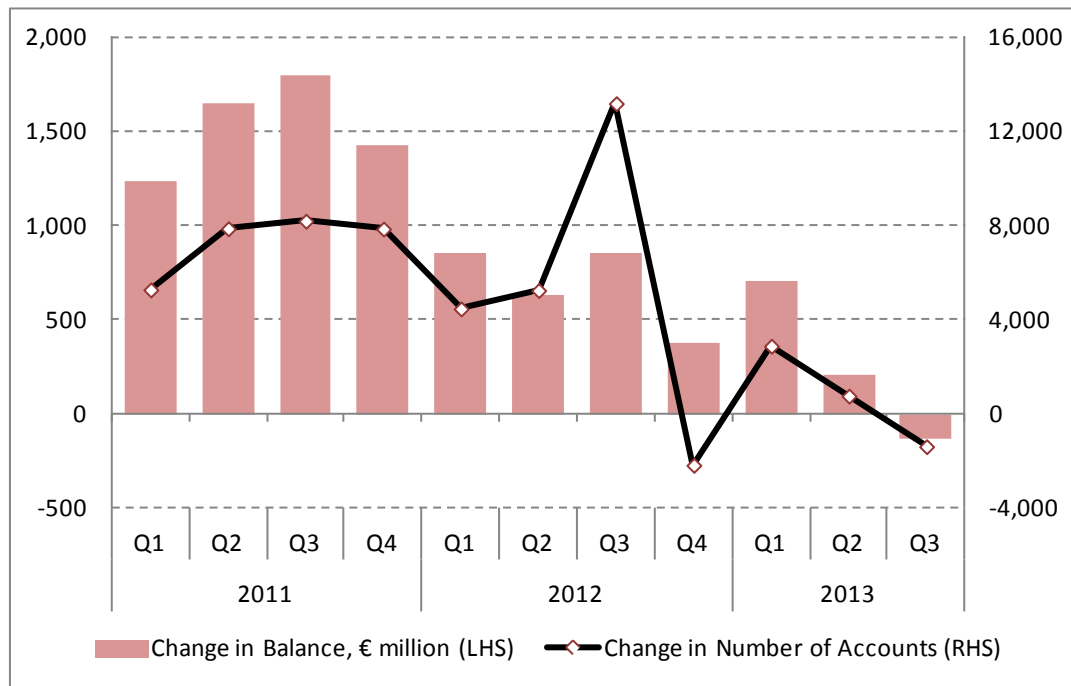
FIGURE 10 Annual Change in Private-Sector Lending for Households and Non-Financial Corporations



Source: Central Bank of Ireland, Money and Bank Statistics.
* 2013 data available up to end-October.

However, a key factor determining banks' ability to lend concerns the continuing uncertainty over non-performing loans, in particular those made prior to the crisis where negative equity is involved. Recent CBI data show a stabilisation in mortgage arrears in the third quarter of 2013, with the outstanding balance of all Principal Dwelling Houses (PDH) accounts in arrears falling for the first time since the series began in Quarter 3, 2009. The decrease included all lengths of arrears, except those more than two years behind on repayments. The number of arrears cases for Buy-to-Let (BTL) accounts, however, continued with an overall increase, though more encouragingly the flow of early arrears (up to 180 days overdue) fell compared to the previous quarter. Figure 11 below shows the stabilisation of mortgage arrears for PDH accounts in recent quarters.

⁴ O'Toole, C. M., Gerlach-Kristen, P. and O'Connell, B. (2013). "SME Debt and Interest Costs in Ireland," QEC Research Notes 2013/2/3, Dublin: Economic and Social Research Institute (ESRI).

FIGURE 11 Quarterly Change in PDH Mortgage Arrears: Overall Balance and Accounts

Source: Central Bank of Ireland, Money and Bank Statistics.

To support economic recovery, and to replenish the very low level of investment currently seen, it is essential that credit be made available to households and businesses. Accordingly, the theme of credit availability has featured prominently in contemporary research on the Irish economy. The implications of ongoing credit constraints were considered in the *Medium-Term Review* published in July 2013. The analysis in the *Review* suggested that, if the problems in the banking system are not addressed and if credit constraints are allowed to persist into the medium term, this could see investment being 16 per cent lower than potential in 2020.

9

Measures of Growth and Output

GNP and GDP

As discussed in detail in the last *Commentary*, it is difficult at present to measure the trend in real activity in the Irish economy. The main factor behind this difficulty is how the pharmaceutical ‘patent cliff’ has impacted on trade, industrial output and GDP (see FitzGerald, 2013, and Dalton and Enright, 2013, for a discussion of the impact).

The impact of the ‘patent cliff’ on exports, services imports and industrial output means that we expect real GDP will increase by less than 0.5 per cent this year. However, the impact of the ‘patent cliff’ on GNP is likely to be much lower reflecting reduced profit outflows. *QNHS* data on employment growth suggests a higher level of activity in the economy than portrayed by the GDP numbers consistent with the much higher growth in GNP shown in the first two quarters national accounts numbers. If our estimates prove correct, then the Irish economy should record growth of 2 per cent in 2013, as measured by GNP.

The international environment remains important for Ireland’s economic outlook. Final demand is expected to have risen by 0.5 per cent in 2013. This increase was primarily driven by exports. However, there are signs of some recovery in domestic demand. If the forecasts for world economy activity and trade growth are realised next year, then the Irish economy should see a further expansion in GNP growth to 2.7 per cent in volume terms. While exports will continue to make the main contribution to growth, there will be some rebalancing as domestic demand starts to make a greater contribution.

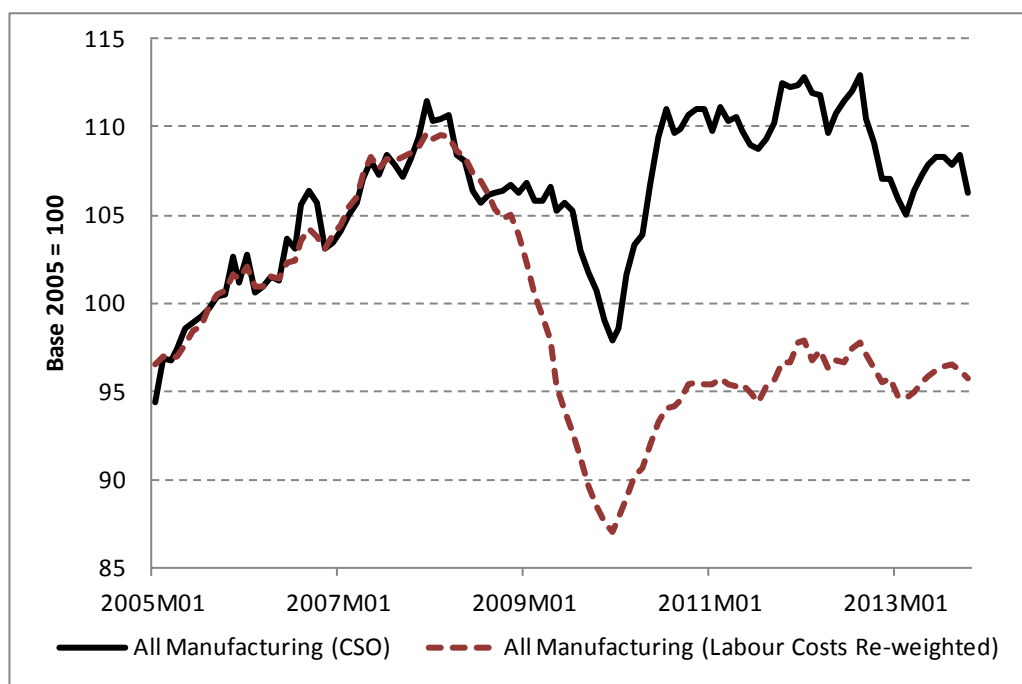
Output

CSO data on the agricultural sector, coupled with data showing an increase in employment, suggests that output in the sector expanded in 2013. Assuming there are no unseasonal weather patterns in 2014 the expansion in output is forecast to continue, with output in the sector increasing by 1.2 per cent.

As highlighted in the previous *Commentary*, the measurement of industrial output is made more difficult by the pharmaceutical ‘patent cliff’. The *Industrial*

Production Index from the CSO shows that manufacturing output in the ten months to October was 2.6 per cent lower compared with the same period in 2012. Sub-indices show that this decline was concentrated in the “modern” sector, where output was down by 4.2 per cent. In contrast, the traditional sector recorded growth of 0.8 per cent. Timoney (2013)⁵ re-weights the industrial production index by labour cost share and finds that over the period manufacturing output declined by a more moderate 0.7 per cent, see Figure 12. While a decline of 6.6 per cent is forecast for the sector as a whole, the re-weighted index suggests that when adjustment is made to take account of the high value added of the pharmaceutical sector, output for industry is more stable. As shown in Table 8 industrial output growth is forecast to improve to 1 per cent in 2014.

FIGURE 12 Industrial Production Index Weighted by GVA and Labour Costs



Source: Central Statistics Office, Industrial Production and Turnover Index and Timoney (2013).

Given our forecast of continued growth in service sector exports and the increases in private sector service employment recorded in the *QNHS* for the first nine months of the year it seems likely that output from this sector has shown strong growth in 2013. This is consistent with the data from the *Monthly Services Index* showing that the value of output rose by 1.9 per cent in the ten months to October when compared to 2012. It is also consistent with the substantial positive carryover in services sector output shown in the *Quarterly National*

⁵ Timoney, K. (2013). “An Alternative Index of Industrial Production for Ireland,” QEC Research Notes, 2013/2/2, Dublin: Economic and Social Research Institute.

Accounts for the first two quarters of 2013. Thus growth of 3.0 per cent in services output is forecast for 2013. On the basis that these trends continue and world activity levels increase as anticipated in 2014 a growth in output of 3.5 per cent is forecast for the services sector.

TABLE 8 Industry and Output

	2011	2011	2012	2013	2014
	Value				
	€ billion	%	%	%	%
Agriculture	3.9	-1.4	-12.6	-2.2	1.2
Industry	38.5	3.7	-0.3	-6.6	1.0
Distribution, Transport, Software and Communications	35.6	0.5	-0.6	3.3	4.3
Public Administration and Defence	6.5	-6.0	-6.3	-3.3	-2.0
Other Services	61.7	-0.2	2.7	3.0	3.5
GVA at Factor Cost	147.6	2.6	0.3	0.2	2.9

10

General Assessment

The Irish economy is, at last, beginning to turn around. Domestic demand in 2013 is likely to contribute to growth for the first time since the crisis began. While the estimated growth in this aggregate in 2013 is still low, at 0.9 per cent, it is a portent of a stronger recovery in 2014 and 2015. On top of this mild recovery in domestic demand is the continuing stimulus to the economy from the robust performance of the export sector, in particular from the growth in exports of services. When taken together these developments mean that GNP is likely to grow by 2 per cent this year and the already significant current account surplus is likely to grow further.

For 2014, assuming that the EU economy returns to growth, the resulting growth in the Irish export sector should complement the expected growth in domestic demand of 1.4 per cent. When combined these two factors should result in a growth rate of GNP of around 2.7 per cent in 2014.

Since we published our last *Quarterly Economic Commentary* (QEC) in October of this year we have not had any additional National Accounts data for Ireland. However, more research and data have become available on the issue of the “patent cliff”, which we identified in the last QEC as having an important effect on the published figures for GDP in 2012 and in the first half of 2013 (FitzGerald, 2013 and Dalton and Enright, 2013).⁶ This additional information serves to highlight the distortion in the published national accounts data and it confirms our view that the best national accounting indicator of underlying activity in the economy this year is the progress of GNP.

The two areas where important new information has become available since we published our last forecast are employment and the public finances. The labour market is the most useful indicator as to what is happening in the Irish economy today – because of the distortions to the *Quarterly National Accounts*. On the basis of both the *Quarterly National Household Survey* (QNHS) data and the *Live Register* data, it is clear that recovery has begun in the Irish economy. The third

⁶ Dalton, M. and S. Enright, (2013). “The Impact of the Patent Cliff on Pharma-Chem Output in Ireland”, Working Paper no. 1, 2013. Dublin: The Department of Finance.
FitzGerald, J., 2013. “The effect on major national accounting aggregates of the ending of pharmaceutical patents”, Dublin: The Economic and Social Research Institute. Research Note 2013/2/1.

quarter figures for employment (and unemployment) were even better than those for the previous three quarters, which all involved substantial growth. This has caused us to revise upwards our estimate of employment growth in 2013 to 2.5 per cent and to revise downwards our forecasts for unemployment next year to 12 per cent of the labour force.

As discussed in Box 1 in this *QEC*, this growth in employment is particularly strong among those who have the highest levels of education. In the four quarters ending in Quarter 3, 2013 employment among graduates was up 3.6 per cent compared to the same period a year ago. Overall, in the four quarters ending in Quarter 3, 2013, total employment was up 1.5 per cent year-on-year. Thus the growth is occurring disproportionately among those with the highest level of education and the highest earning power (and productivity).

This helps explain the buoyancy of personal tax receipts at a time when average hourly earnings are not rising significantly. The changing educational composition of those employed, with the share of graduate employment showing a continuous rise, is adding to the growth in the total wage bill for the economy. O'Brien (2011)⁷ also suggested that, in a recovery, new hires by the private sector might take place at lower wage rates than for existing employment. This would mean that in the initial stages of the recovery, competitiveness would continue to improve, against a background where wage rates are rising, albeit slowly, in our competitors.

The second major set of new data available since the last *QEC* relates to the public finances. The Budget for 2014 was announced in October. As signalled in advance, the actual discretionary cut in the deficit that was implemented in the Budget was €2.5 billion, compared to the €3.1 billion that had previously been planned. As indicated in the last *QEC*, we felt that, because of the uncertainty about future growth, it would have been better to have made the larger adjustment, as originally planned. However, if our forecasts prove to be correct, there may not be a need for an additional adjustment in 2015 to make up for this shortfall.

As discussed in a Research Note in this *QEC*, the Budget is marginally less contractionary than we had assumed in our last *QEC*, adding slightly to the growth rate compared to our Autumn forecast. However, as discussed in our analysis of the fiscal stance of the 2014 Budget, the full effects of the Budget for next year will be to reduce growth by 0.9 percentage points below what it would

⁷ O'Brien, F., (2012). Comment on "Wage Bill Change in Ireland During Recession – How Have Employers Reacted to the Downturn?" by K. Walsh, *Journal of the Statistical and Social Inquiry Society of Ireland*, Volume XLI, pp. 67-8.

otherwise have been. Thus the fact that we are still forecasting growth in GNP next year of 2.7 per cent reflects the underlying robust state of the economy; on this basis, without a fiscal contraction, growth next year would be about 3.6 per cent.

The latest figures for the public finances to the end of November also reflect the fact that the economy is returning to growth. It now seems likely that the outturn for the General Government Deficit for this year will be significantly better than planned: we are forecasting a deficit of 7.1 per cent of GDP this year. The knock-on effects of this larger than planned reduction in the deficit this year, and the forecast of growth next year of 2.7 per cent, should see the deficit come in at 4.4 per cent of GDP for 2014. As indicated earlier, next year there is a greater likelihood that there will be further outperformance compared to our forecast for the public finances, rather than underperformance.

As discussed in our last *QEC*, labour productivity (GDP per person employed) has only fallen in one year in the last half century. In the case of GNP per person, employed there were falls in only four years in the last 50 (including 2008 and 2009). Thus such a fall in productivity is exceptional in Irish circumstances. The current forecast would suggest that productivity, when measured in terms of GNP per person employed, is negative this year (and even more negative in the case of the GDP measure). Given the nature of the employment growth (heavily weighted to graduates) this may well be a very conservative assumption. Thus, while we are not changing our forecast for GNP growth for this year from our previous estimate of 2 per cent, it remains quite possible that this number may be revised upwards in our next *QEC* when more definitive information becomes available in the new year. For next year we are forecasting some growth in GNP per person employed on top of slightly slower growth in employment: a growth rate driven more by productivity gains. This explains our forecast for next year of a growth of 2.7 per cent in GNP.

The main downside risk to this forecast for Ireland is the possibility that the expectation of many international experts that the European economy will turn around in 2014 could prove to be illusory. While the impact of Eurozone fiscal policy will be less negative in 2014 than this year, it will still be an important factor hampering an EU recovery (EUROFRAME, 2013⁸). It would obviously be much better if fiscal policy was reversed in countries such as the Netherlands and Germany. The agreement underpinning the new government in Germany may help by resulting in a limited relaxation of the fiscal stance in that country. In a

paper by in't Veld, 2013,⁹ the negative effects for peripheral countries of a contractionary fiscal policy in the core countries (such as Germany and the Netherlands) are modelled. This paper suggests that the negative spillovers for other countries from contractionary fiscal policy in large economies are substantial. It suggests that a temporary fiscal stimulus in surplus countries could boost output and help reduce their current account surpluses. In turn, the positive spillovers from such a policy change “would support growth in the core countries and spillovers to the periphery countries would ease their adjustment”.

Finally, the current very low rate of inflation in the Eurozone is aggravating the problems of heavily indebted countries, such as Ireland. The European Central Bank's latest forecast for inflation over the next two years suggests that they will consistently undershoot their target for inflation. In a world where falls in nominal wage rates are very unusual, this will make it all the more difficult for countries such as Greece, Portugal and Spain to improve their competitiveness. It will also slow the recovery for indebted countries and individuals, as nominal incomes rise at a very slow pace. Action on EU fiscal policy could contribute to the task of returning the inflation rate of the Eurozone closer to the 2 per cent target.

⁹ In't Veld, J. (2013). “Fiscal consolidations and spillovers in the Euro area periphery and core”, Brussels: European Commission. *Economic Papers*, 506.

Detailed Forecast Tables

FORECAST TABLE A1 Exports of Goods and Services

	2011	% change in 2012		2012	% change in 2013		2013	% change in 2014		2014
	€ bn	Value	Volume	€ bn	Value	Volume	€ bn	Value	Volume	€ bn
Merchandise	85.0	1.0	-3.6	85.9	-4.1	-3.9	82.3	2.8	2.0	84.7
Tourism	3.0	0.4	-0.2	3.0	5.7	5.0	3.2	4.8	4.0	3.3
Other Services	78.5	11.2	7.2	87.3	5.1	4.1	91.8	8.5	7.0	99.6
Exports Of Goods and Services	166.5	5.8	1.6	176.1	0.7	0.3	177.3	5.8	4.6	187.6
FISM Adjustment	0.5			0.6			0.6			0.7
Adjusted Exports	167.0	5.9	1.6	176.7	0.7	0.3	177.9	5.8	4.6	188.2

FORECAST TABLE A2 Investment

	2011	% change in 2012		2012	% change in 2013		2013	% change in 2014		2014
	€ bn	Value	Volume	€ bn	Value	Volume	€ bn	Value	Volume	€ bn
Housing	3.8	-19.8	-21.4	3.1	0.6	0.0	3.1	17.1	13.5	3.6
Other Building	5.1	10.3	7.2	5.6	6.8	3.1	6.0	6.8	2.0	6.4
Transfer Costs	0.4	-4.1	22.9	0.3	18.7	12.0	0.4	18.7	12.0	0.5
Building and Construction	9.3	-2.8	-4.1	9.0	5.1	2.5	9.5	10.7	6.3	10.5
Machinery and Equipment	8.0	5.3	2.6	8.4	3.5	1.7	8.7	4.4	2.4	9.1
Total Investment	17.3	1.0	-1.0	17.4	4.3	2.1	18.2	7.6	4.5	19.6

FORECAST TABLE A3 Personal Income

	2011	Change in 2012		2012	Change in 2013		2013	Change in 2014		2014
	€ bn	%	€bn	€ bn	%	€bn	€ bn	%	€bn	€ bn
Agriculture, etc	3.2	-9.5	-0.3	2.9	3.0	0.1	3.0	2.5	0.1	3.0
Non-Agricultural Wages	68.3	0.1	0.1	68.4	2.5	1.7	70.1	3.3	2.3	72.4
Other Non-Agricultural Income	13.3	19.9	2.6	15.9	9.4	1.5	17.4	11.5	2.0	19.4
Total Income Received	84.7	2.8	2.4	87.1	3.8	3.3	90.4	4.8	4.4	94.8
Current Transfers	25.3	-1.0	-0.2	25.0	-2.7	-0.7	24.4	-3.0	-0.7	23.6
Gross Personal Income	110.0	2.0	2.2	112.2	2.3	2.6	114.8	3.2	3.6	118.4
Direct Personal Taxes	22.6	2.0	0.5	23.1	5.5	1.3	24.3	7.7	1.9	26.2
Personal Disposable Income	87.4	1.9	1.7	89.1	1.5	1.3	90.5	1.9	1.7	92.2
Consumption	82.4	0.3	0.3	82.6	1.0	0.8	83.5	2.3	1.9	85.4
Personal Savings	5.0	28.7	1.4	6.5	7.8	0.5	7.0	-2.6	-0.2	6.8
Savings Ratio	5.8			7.3			7.7			7.4
Average Personal Tax Rate	20.5			20.6			21.2			22.1

FORECAST TABLE A4 Imports of Goods and Services

	2011	% change in 2012		2012	% change in 2013		2013	% change in 2014		2014
	€ bn	Value	Volume	€ bn	Value	Volume	€ bn	Value	Volume	€ bn
Merchandise	48.3	2.4	-2.9	49.5	-0.7	-1.0	49.2	3.3	2.3	50.8
Tourism	4.8	-4.3	-7.1	4.6	2.0	0.5	4.7	3.6	1.1	4.9
Other Services	78.4	5.3	2.3	82.5	3.0	2.0	85.0	6.8	5.0	90.7
Imports of Goods and Services	131.5	3.9	0.0	136.6	1.7	0.9	138.8	5.5	3.9	146.4
FISM Adjustment	0.3			0.4			0.4			0.5
Adjusted Imports	131.8	3.9	0.0	137.0	1.7	0.9	139.3	5.5	3.9	146.9

FORECAST TABLE A5 Balance of Payments

	2011	2012	2013	2014
	€ bn	€ bn	€ bn	€ bn
Exports of Goods and Services	166.5	176.1	177.3	187.6
Imports of Goods and Services	131.5	136.6	138.8	146.4
Net Factor Payments	-31.8	-31.1	-28.9	-30.0
Net Transfers	-1.2	-1.2	-1.3	-1.3
Balance on Current Account	2.0	7.3	8.2	9.8
As a % of GNP	1.5	5.5	6.0	7.0

FORECAST TABLE A6 Employment and Unemployment, Annual Average

	2011	2012	2013	2014
	000s	000s	000s	000s
Agriculture	83	86	105	111
Industry	348	336	344	357
Of which: Construction	108	102	103	106
Services	1,414	1,415	1,434	1,454
Total at Work	1,849	1,839	1,884	1,923
Unemployed	317	316	283	261
Labour Force	2,166	2,154	2,162	2,178
Unemployment Rate, %	14.6	14.7	13.1	12.0

Special Articles

Distributional Impact of Tax, Welfare and Public Service Pay Policies: Budget 2014 and Budgets 2009-2014

***Tim Callan, Claire Keane, Michael Savage and John R. Walsh**

Abstract

This article analyses the available evidence on the impact of Budget 2014, and of the series of Budgets from October 2008 up to and including October 2013. New analysis takes into account several aspects of policy which could not previously be included – such as the impact of DIRT tax increases, increases in Capital Gains Tax, and the abolition of the social welfare Christmas bonus. The analysis also covers the main indirect tax increases – carbon tax and VAT which affect the purchasing power of household income.

The results show that Budget 2014 had its greatest impact – a reduction of 2 per cent – on low income groups. The lowest impact was on some middle income groups (a loss of 1 to 1¼ per cent) while the top income group lost slightly less than 1¾ per cent – somewhat more than the middle, and less than the bottom income group.

Over the full period from 2009 to 2014, the results are quite different. All income groups experienced losses. The highest losses were for those in the highest 10 per cent of household income (adjusted for family size). This group saw losses of about 15½ per cent, mainly from tax increases and reductions in public service pay. At the other end of the income scale, policy-induced losses were somewhat higher than average (about 12½ per cent) for those with the lowest incomes. For most other income groups, the income loss was in a narrow range, between 11 and 12 per cent.

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We thank CSO for access to SILC data on which the SWITCH tax-benefit model is based. We are grateful to Sean Lyons and Anne Pentecost for estimates of the distributional impact of indirect taxes, as described in the Appendix.

Introduction

These results do not conform with either a progressive pattern (losses increasing with income) or regressive pattern. (losses declining with income). Over a substantial range the pattern is broadly proportional – similar percentage losses for each income group. But this does not extend to whole income distribution. Contrary to some perceptions of a sharper squeeze on middle income groups, the greatest losses have been at the top of the income distribution, and the next greatest losses at the bottom.

In this article we focus on the distributional impact of the main tax and welfare measures in Budget 2014 and the public service pay and pension measures contained in the Haddington Road Agreement. We also look at the distributional impact of the “austerity budgets” from Budget 2009 (budgets in October 2008 and April 2009) up to and including Budget 2014, and earlier public service pay and pension changes. We use SWITCH, the ESRI tax-benefit model, to ensure that we obtain a nationally representative picture based on SILC (Survey of Income and Living Conditions), the CSO’s main survey of household income.¹ The areas covered by SWITCH – including income tax, social insurance, property tax, welfare benefits and public service remuneration – account for the bulk of the cash impact of budgetary policy changes in recent years. There are, however, some taxes (e.g., indirect taxes, which affect the purchasing power of cash incomes) which cannot at present be integrated fully within that framework. Here we use a number of experimental approaches (described in the Appendix) which allow us to extend the coverage of the analysis to take account of the following:

- the introduction of a carbon tax and a later increase in its rate
- changes to VAT
- increases in the Deposit Interest Retention Tax (DIRT)
- restrictions on pension tax reliefs for high income earners,
- and restrictions on tax relief for medical insurance premia.
- increases in Capital Gains Tax (CGT)

In this analysis we do not attempt to measure the impact of cuts in public services on households at different income levels. While this is an important area, it raises complex questions as to the appropriate concepts and measures to use - as pointed out by O’Dea and Preston (2012) and by Callan and Keane (2009). Like most assessments of the distributional impact of policy – in Ireland and internationally – we focus here on taxes and transfers, which have a clearer cash value, rather than on services, for which there are separate and substantial

¹ While selected examples can illustrate particular points, they are unable to provide a broadly representative picture of the impact of tax and welfare policy changes.

problems of valuation and attribution. NESC (2013) reviews available evidence on the impact of cuts in public services.

Measuring the Distributional Impact of Policy

Where in the income distribution will the losses from Budget 2014 be felt most strongly? What has been the overall impact of the austerity budgets since 2008? Analysis based on a selected example such as a single person, a couple with two children and so on fails to give us an overall picture of the impact of the budget for the population as a whole. It also fails to take into account how common or uncommon these household types are in the population. Even within the same household type differences are likely with respect to labour market status, income levels and so on. To get the true distributional impact we must calculate the impact of tax and welfare policy changes on large numbers of real households in a nationally representative sample. The ESRI tax-benefit model (*SWITCH*) allows us to do this: it estimates the impact of direct tax and welfare changes using anonymised data from the CSO's SILC.

The impact of policy change must be measured against an alternative specifying what would happen if the policy change did not take place (a “counterfactual” policy). In the construction of budgets, the official procedure constructs an “opening budget” against which changes are measured. For tax and welfare the conventional opening budget simply freezes tax rates, credits and welfare payments at their existing levels. While this is useful in accounting terms, it would be highly misleading in an analysis of distributional impact.² In normal times, with wage growth and price inflation positive, and positive real wage growth, implementing the conventional opening budget would lead to real income losses for those dependent on welfare, while incomes would rise further up the income distribution. (Callan *et al.*, 2001, Bargain and Callan, 2008).³ The alternative used here is a policy which indexes both tax and welfare parameters with respect to the expected growth or decline in wages. This ensures that average tax rates are held constant (i.e., no fiscal drag); and leads to approximately equal growth (or decline) in income across different income groups (Callan *et al.*, 2001). It should be clear that this is designed to provide a “distributionally neutral” benchmark, and is not intended as a policy recommendation. There are many reasons why it may be desirable to depart from this benchmark; but having a distributionally neutral benchmark is essential in examining the distributional impact of policy changes.

² For a more detailed exposition, see Callan *et al.* (2001).

³ When wages are falling, the conventional benchmark would give rise to income gains for welfare recipients and income losses for those in employment.

Forecasts of wage growth and decline are needed to implement this approach on a prospective basis. Similarly, accurate economy-wide measures of wage growth are needed for implementation on a retrospective basis. Results examining the impact of Budget 2014 are based on an estimate of wage growth of 1.2% based on the average of wage growth forecasts by the ESRI's Quarterly Economic Commentary (Duffy et al., 2013) and the Central Bank's Quarterly Bulletin (Central Bank, 2013)

For income growth between 2008 and 2014 we use a combination of the most recent figures on wage growth from the CSO's Earnings Hours and Employment Costs Survey and again use the average of the wage forecasts from the ESRI's Quarterly Economic Commentary and the Central Banks Quarterly Bulletin. The net result is growth in wages of less than half of one per cent. All results shown are at the household level and are based on household's disposable income (after taxes and benefits), adjusted for household size and composition, i.e., income per adult equivalent or "equivalised income"⁴.

Budget 2014

The taxation, welfare and public service remuneration measures which are directly included in our analysis are:

- Local Property Tax payable for a full year, rather than the half year payment in 2013
- A full year of the public service pay and pension reductions under the Haddington Road Agreement
- The reduction in the pension-related deduction for public service workers (as part of the Financial Emergency Measures in the Public Interest Act 2013)
- Abolition of the telephone allowance
- Reduction in Jobseeker's Allowance for those aged 22-25
- The standardisation of Child Benefit to €130 per child as announced in Budget 2013
- The reduction in the earnings disregard for those in receipt of the one parent family payment from €110 to €90 per week as announced in Budget 2013
- The standardisation of the minimum and maximum rates of Maternity Benefit at €230 per week
- The €5 increase in the minimum contribution for couples towards their rent under Rent Supplement scheme

⁴ This adjusts income to take account of household size. The scale used is the scale used in official monitoring of poverty in Ireland, i.e., 1 for the first adult, .66 for subsequent adults and .33 for children aged 14 or under.

- Removal of the Back To School payment for those who are over 18 and engaged in third level education.

The change from a One-Parent Family Tax Credit to a new Single Person Child Carer Tax Credit could not be modelled from the data available in the survey.

Budget 2014 also contained three further measures which we have attempted to incorporate in the analysis, specifically:

1. Restrictions on tax relief for medical insurance premia in excess of €1,000 per adult and €500 per child
2. Restrictions on tax relief for pensions paying more than €65,000 per annum.
3. An increase in DIRT tax from 33 per cent to 41 per cent.

The details of our approach in each of these areas are given in the appendix to this article. Here we may note some key features. For the medical insurance reliefs, we are able to use data on medical insurance premia reported in the SILC data to identify those who will be affected, and by how much. This can be combined with the existing information on their income situation to arrive at an estimate of the overall distributional impact of this component.

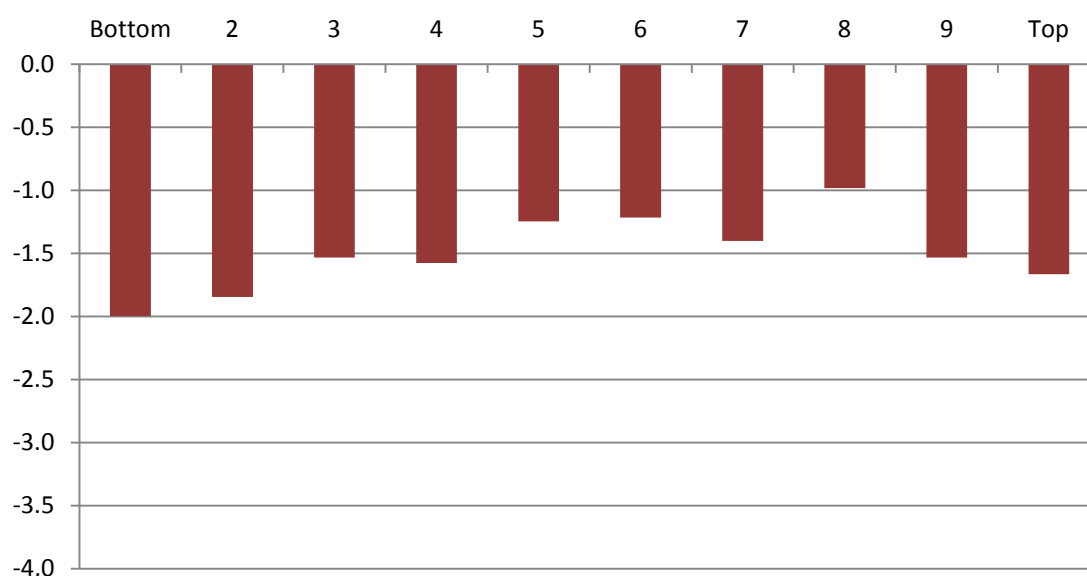
For the restriction on tax reliefs on pensions, we adopt the budgetary estimate of the likely revenue gain, and distribute this to the top two deciles – in the ratio 2/3 to the top decile, 1/3 to the ninth. The logic here is that the revenue gain is related to a realised pension of over €65,000 – which itself is enough to put an individual into the top decile or high in the ninth. This approach follows the budgetary estimate in taking a “cash” view of the tax to be paid, rather than accruing a liability over time – an approach which might be preferable, but which is not available due to lack of data at present.

Deposit Interest Retention Tax (DIRT) raises further issues. SILC data are not well suited to identifying the overall distribution of deposit interest, as it is possible for respondents in receipt of small amounts to indicate simply that they obtain less than €100 per year. A new CSO survey on Household Consumer Finance will include information on the distribution of deposits. Until its publication we must rely on indications from much earlier surveys (Nolan, 1991) which suggest a split of about 50% of deposits in the top 3 deciles, and about 25% each in the bottom 4 and the middle 3 deciles. There are indications of a similar split in the UK based on 2005 data⁵. We attribute the increases in DIRT tax payments based on shares which are an average of these two distributions (see appendix). Coincidentally,

⁵ O’Dea, personal communication, based on the research undertaken for Crossley and O’Dea (2010).

these distributions are quite similar to the distribution of disposable income; if this were true, then DIRT would act like a proportional tax across the income distribution. It should be noted, however, that household surveys typically do not represent the full level of deposits – whether because of underrepresentation of those with large deposits, or because of underreporting. There are therefore further issues to be investigated about the location of these underrepresented or underreported deposits in the income distribution. Finally, it must be noted that the treatment of DIRT which is possible here does not capture the effect of the exemption from DIRT available to low income elderly persons. To the extent that this option is taken up, this will reduce the impact of the DIRT increase on low income deciles. Given the factors just mentioned, the results regarding DIRT must be regarded as tentative, and we await the findings of the Household Consumer Finance Survey with interest.

FIGURE 1 Impact of Budget 2014 - Percentage Change in Disposable Income by Income Decile



Sources: SWITCH estimates at December 2013, including the impact of a full year of the Local Property Tax, and a full year of the Haddington Road Agreement, reductions in Jobseeker payments for the young unemployed, other welfare measures specified in the text. These estimates are augmented by results on DIRT and specific restrictions on tax relief for medical insurance premia and pension contributions as specified in the Appendix.

Figure 1 shows that the largest losses from Budget 2014 are for the bottom decile – an average loss of 2 per cent – and for the second decile. Most other income groups lose on average by between 1 and 1.5 per cent, with a marginally greater loss for the top decile. The somewhat higher losses for deciles 1 and 2 can be characterised as mildly regressive, but the scale of the percentage differences between other deciles is small, and the lowest losses are not for the top income groups – as would be the case for a classic regressive pattern – but for some of the middle income deciles (deciles 5, 6 and 8).

It should be recalled that these losses are relative to the benchmark scenario, in which welfare payments and tax bands and credits are indexed in line with wage

growth of 1.2 per cent. This indexed benchmark reminds us that even if taxes and welfare were kept constant in nominal terms, those in work would experience some “fiscal drag” as more of their income would be taxed at higher rates; and those depending on welfare payments would see their incomes fall further behind the average.

Budgets 2009-2014

Ireland’s fiscal adjustment has been long and painful. Having examined the latest instalment – Budget 2014 – we now review the impact of the overall adjustment, from the initial Budget 2009 (October 2008) onwards. How have the changes implemented since the onset of the recession affected those at differing income levels? In this analysis we include the following measures which are part of the “core” SWITCH model analysis:

- the introduction of Universal Social Charge.
- elimination of the PRSI ceiling
- the main changes to income tax – including cuts to income tax credits and the width of the standard rate band
- the net changes in welfare payment rates over the period, with pension payment rates retaining the increase awarded in October 2008, and working-age payments ultimately reduced below their 2008 levels
- reductions in Child Benefit
- reductions in Jobseeker’s Allowance for the young unemployed
- the impact of the public sector pension levy (Pension Related Deduction – PRD)
- explicit cuts in public service pay in 2010 and in 2013 as part of the Haddington Road Agreement).
- reductions in public service pensions
- The introduction of the Local Property Tax
- the Non-Principal Private Residence Charge

In addition, the SWITCH model estimates now include the impact of the abolition of the Christmas bonus for welfare recipients in 2009.⁶

Again, we augment the standard SWITCH model with estimates from other sources⁷ of the distributional impact of a number of other policy changes. These estimates are necessarily less precise, for reasons explained in the Appendix, and

⁶ Initially it was not possible to distinguish between those on short-term Jobseeker’s Assistance (who did not receive the bonus) and long-term Jobseeker’s Assistance (who did receive the bonus). Work undertaken earlier this year resolved this issue and allows the impact of the abolition of the bonus to be examined.

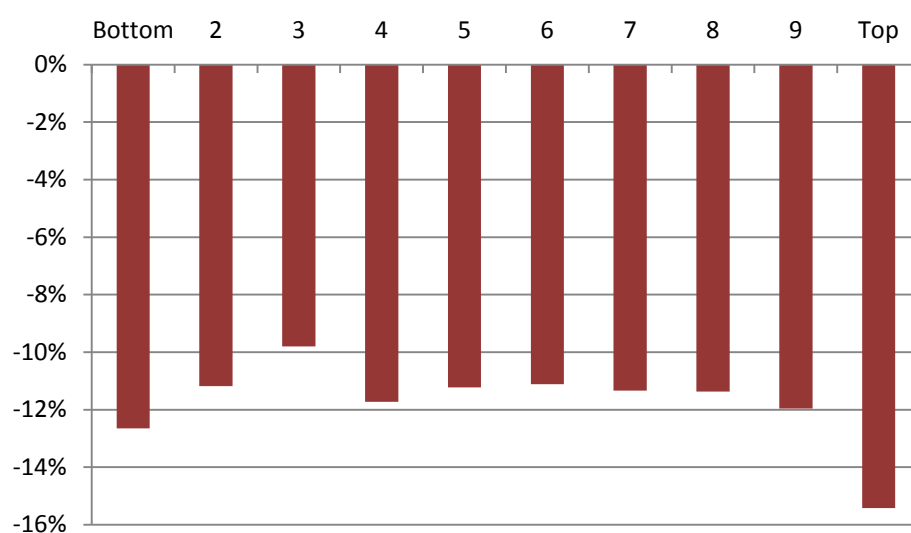
⁷ Details of the methods can be found in the Appendix.

the possibilities of improving the precision of these estimates is under consideration.

- The impact of carbon tax and of VAT changes is incorporated using results based on Callan et al. (2009) and Leahy et al, (2011)
- Budget 2014 restrictions on tax reliefs on pension contributions and medical insurance premia are included as detailed in the Appendix
- Estimates of the impact of DIRT increases over the 2009-2014 period are included as described in the Budget 2014 analysis
- We derive an approximate estimate of the impact of Capital Gains Tax across the income distribution, based on information kindly supplied by the Revenue Commissioners. The methods used are entirely our responsibility and are described in the Appendix.

Figure 2 illustrates that over this 6 year period, the distributional impact shows that for seven of the 10 deciles, the income loss arising from budgetary and public service pay policy was between 11 and 11 ¾ per cent. Outside this band, the highest losses were for the top decile, which is estimated as having lost close to 15 ½ per cent of its income due to the policy changes examined here. The bottom decile is estimated as having policy-induced losses of 12½ per cent.

FIGURE 2 Impact of Budgetary Policy 2009-2014 - Percentage Change in Disposable Income by Income Decile



Sources: SWITCH model at December 2013 incorporating main changes in direct tax, welfare and public service pay/pensions; augmented by results on carbon tax and VAT, DIRT, specific Budget 2014 restrictions of tax reliefs for pension contributions and medical insurance premia, and Capital Gains Tax as described in the Appendix.

The overall scale of the impact of austerity policies is determined by macro-level decisions regarding the size of tax increases and the extent of the reduction in welfare payments and public service pay. The distribution of these income losses

over income groups depends on the detail of budgetary decisions regarding tax structures, welfare payment rates and decisions on the structure of public service pay cuts. Figure 2 summarises how the adjustment is spread over income groups (deciles) ranked from poorest to richest, taking into account these detailed tax, welfare and public service pay decisions.

These results do not conform with either a progressive pattern (losses increasing with income) or regressive pattern. (losses declining with income). Over a substantial range (deciles 4 up to and including decile 9 – and also decile 2) the pattern is broadly proportional. But this does not extend to whole income distribution. Contrary to some perceptions of a sharper squeeze on middle income groups, the greatest losses have been at the top of the income distribution, and the next greatest losses at the bottom. Only the third decile had a significantly lower loss (under 10 per cent) than others.

How do these results compare with the most recent estimates based on the SWITCH model alone,⁸ which were published in September 2013, covering Budgets 2009 to 2013 inclusive? The greatest losses are at the top, by a significant margin in each case. The impact on the bottom decile is greater in the current, extended analysis, for three main reasons:

1. The impact of indirect taxes, already examined in our analysis of Budgets 2010 and 2012, bore more heavily on low income groups. The carbon tax, introduced in 2010, and later increased, is the main driving factor, leading to a reduction of close to 1½ per cent in the income of the bottom decile.
2. Allowing for the abolition of the Christmas bonus welfare payments in 2009 adds slightly over half of one per cent to losses of the bottom decile.
3. Budget 2014 itself, as seen in analysis above, led to a loss of about 2 per cent in income for the bottom decile.

The second decile is subject to similar influences, but the third decile remains the one where policy reduced income by the lowest percentage.

⁸ See <http://tinyurl.com/lnu9nse> for the September 2013 analysis, which does not include the items in the Appendix to the present article.

Conclusion

This article provides information on the distributive impact of Budget 2014, including for the first time estimates of the impact of DIRT increases, and of restrictions in tax relief for pension contributions and medical insurance premia. The inclusion of these instruments makes for a more even impact across the income distribution, but the greatest impact is still on those with the lowest incomes. One caveat is that the distribution of deposits, and deposit interest income, is based on available evidence which is less than ideal – more will be known when the CSO reports results from its Household and Consumer Finance Survey next year, and we plan to revisit the issue at that point.

Turning to the longer-term view of impacts over the 2009 to 2014 period, we are now able to provide a picture which includes in addition to the standard tax and welfare measures, the impact of DIRT increases, Capital Gains Tax increases, VAT and carbon tax, and the abolition of the Christmas bonus in 2009. It is still the case that policy changes gave rise to the largest losses at the top of the income scale: the top 10 per cent of households lost by 15½ per cent. The next highest losses are at the bottom of the income scale, where incomes were reduced by 12½. Losses are relatively even across other income groups at around 11 per cent, except for the third decile which had the lowest loss of less than 10 per cent. Thus, policy impacts were greatest at the top, and then at the bottom of the income distribution – contrary to some perceptions of a particularly sharp squeeze on middle incomes.

Appendix: Methods and Sources

The way in which the SWITCH model simulates direct taxes, cash benefits and changes in public service pay has been set out in a series of papers (most recently Keane et al. (2012)). The model is currently based on 2010 SILC data, which can be uprated and reweighted to represent later years.

When seeking to identify policy impacts, we compare actual policy for a given year with a “distributionally neutral” benchmark, obtained by indexing policy from the base year in line with wage growth (or in some cases, wage decline) between the base year and the end year.

There is a choice between modelling the policy impact using a base year or end year population. This familiar index number problem is discussed in Bargain and Callan (2010), who find that a geometric average of the results under base- and end-period weighting has some desirable properties. However, this technique can

only be used when data for both the base and the end period are available. When seeking to cover the most recent policy developments this is simply not possible – at best, there is typically a two to three year lag from data collection to data processing and analysis, and the incorporation of new data into a tax -benefit model.

Our estimates are reweighted to represent the 2014 situation for the 2013/14 analysis and for the longer run analysis (2009-2014). We have also examined the alternative of using a sample calibrated to the initial year, and the main conclusions presented here are not affected.

As the SILC data does not contain information on items such as expenditure we focus next on the methods used to incorporate estimates of the distributional impact of a number of different policy elements into the overall mix.

Carbon Tax

The distributional effects of the increase in carbon tax were estimated by Sean Lyons, based on the ESRI ISus model and using the CSO's Household Budget Survey 2004/5 Microdata File. This updates earlier work by Callan, Lyons et al (2009) which found that a €20 carbon tax was regressive. HBS data showed that the richest households emitted only 37 per cent more carbon dioxide than the poorest households—while the equivalised disposable income of the richest households was eight times that of the poorest. The estimated impact of the €20 carbon tax on disposable income ranged from a 1.4 per cent loss for the bottom decile, to a 0.4 per cent loss for the top decile. These estimates of the impact on disposable income by decile are used in this article.

VAT

We take a similar approach to include the distributional impact of changes in VAT as we do for the carbon tax increases. We rely on estimates of the distributional impact of changes in VAT from Leahy et al. (2011). Using the 2004/2005 Household Budget Survey, the authors assessed the amount of VAT that households pay as a proportion of weekly disposable income, and reported results by decile of equivalised household disposable income. They showed that the poorest households were worst affected by increasing the standard VAT rate from 21 per cent to 23 per cent and lowering the reduced VAT rate to 9 per cent for some items (including non-bread bakery products)⁹. The bottom decile spent

⁹ The reduction in the reduced VAT rate was not included in Leahy et al. (2011) but estimates of its effects were kindly supplied by Sean Lyons and Anne Pentecost, based on the same model.

almost 1 per cent more of their income on VAT as a result of the change. The top decile spent less than 0.4 per cent more of disposable income on VAT following the change. Again, we use these estimates of the distributional impact of the VAT increase in this article.

Medical Insurance Premia

The SILC data contains information on health insurance premiums. We adjusted these premiums to 2014 values and identified the distribution of those whose premium was in excess of the limit of €1,000 per adult and €500 per child. We simulated the implications of the new rules for the tax liabilities of those affected, and derived the distribution of the increased tax liabilities across the income distribution. This distribution was then used to apportion the tax increase, estimated by us at €84m, to relevant deciles. Budget 2014 indicates an expected revenue increase of €127 million; overall findings were not very sensitive to a scenario in which the tax increase was calibrated to this level.

Deposit Interest Retention Tax

The CSO are currently conducting the Household Finance and Consumption Survey which will provide valuable information in this area, but results will not be available until 2014. The SILC data provides information on interest income, but respondents are permitted not to answer if they indicate that their interest income was less than €100 per year. This makes for difficulties in interpreting the distribution of interest income. We therefore draw on two other sources to arrive at an approximate distribution of increased DIRT liabilities across income deciles. The first is Nolan (1991) which describes the pattern of deposit holdings across income deciles in Ireland in 1987. While this may seem too long ago to be useful, it is remarkable that a very similar distribution is found in recent years for the UK (O'Dea, personal communication, based on data from the British Household Panel Study, as used by Crossley and O'Dea (2010)). We use a simple average of these two sources as our basic distribution of deposits across income groups. Broadly speaking the distribution is concentrated on high incomes – but only to about the same extent as income. This may seem surprising, as wealth is often thought to be more concentrated on high incomes. However, it may be that those in high income deciles tend to hold their wealth in a more diversified portfolio, with bank deposit accounts competing with pensions, property and other financial assets. Furthermore there are older persons who have significant assets but low incomes.

On all of these issues, the new CSO Survey on Household Finance and Consumption will tell us much more and we will adjust our estimates in the light of new information.

Pension Tax Relief

The impact of the cap on pension tax relief is particularly difficult to quantify at present. The policy is designed to affect only those whose pension income will be above €65,000; and to operate only when that pension is realised and put into payment. Official estimates indicate exchequer savings for 2014 in the region of €120 million¹⁰. Pension incomes of €65,000 would, for a single person and many couples, imply that the recipient was in the top decile or at least the ninth. We therefore assume that two-thirds of the impact will be on the top decile, and one-third on the ninth decile. Some other divisions, allocating less to the top quintile, and some losses to deciles 7 and 8, led to similar results.

Capital Gains Tax

Most surveys of household income distribution do not include information on capital gains, and as a result, most analyses of distributional impact do not include capital gains or capital gains taxes within their remit. (Canberra Group, 2012). It can be argued, however, that where, as in many countries, capital gains tax rates are lower than the relevant personal income tax rate, high income individuals have an incentive to take income in the form of capital gains. Even without this incentive, the association between high income, high net worth and capital gains means that capital gains taxation may tend to be focused on high income individuals.

Here we investigate this issue, using aggregate statistical information supplied by Revenue on the distribution of capital gains tax payments over tax units by gross income class for 2011. Mapping from this information into household deciles is not straightforward – essentially requiring a conversion from gross income to equivalised disposable income, which can only be done in an approximate fashion. However, the fact that a very high proportion of capital gains tax liabilities was attributable to those with incomes of more than €150,000 made it clear that about three-quarters of CGT liabilities could be attributed to the top decile. We have used this statistical profile to attribute the projected revenues from increased capital gains tax as a charge on the incomes of households in the SILC survey.

¹⁰ See <http://www.kildarestreet.com/wrans/?id=2013-11-05a.500>

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Lost in Transition?

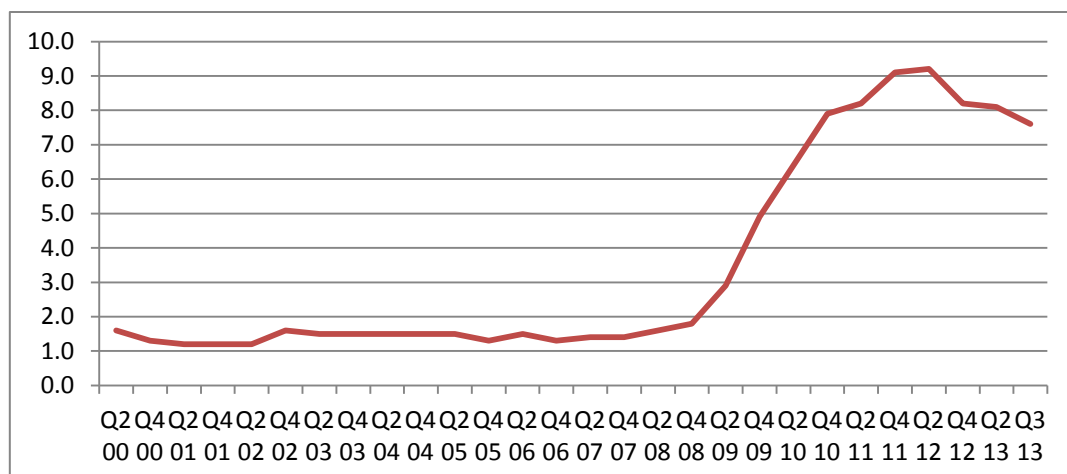
The Labour Market Pathways of Long-term Unemployed Individuals in Ireland Pre and Post the Great Recession

Elish Kelly and Seamus McGuinness

1. Introduction

During the Celtic Tiger era, the long-term unemployment rate in Ireland fell to as low as 1.2 per cent (see Figure 1). In 2007, just prior to the onset of the Recession, the rate averaged 1.4 per cent. When the economy contracted between 2008 and 2010, and again in 2011, both unemployment and long-term unemployment increased considerably. During this period, the unemployment rate peaked at 15.1 per cent in Quarter 3 2011, while the long-term unemployment rate reached its highest level of 9.5 per cent in Quarter 1 2012. At that time, more than 204,300 people were classified as being out of work for one year or more, 148,900 of whom were male (73 per cent) and 55,400 female (27 per cent). Since then, the unemployment and long-term unemployment rates have declined to 12.8 and 7.6 per cent respectively (Central Statistics Office, 2013).¹ While these reductions are to be welcomed, both rates continue to be high by international standards and long-term unemployment still accounts for 58.4 per cent of total unemployment.

FIGURE 1 Long-term Unemployment Rate in Ireland: 2000 - 2013



Source: Constructed with data from the published *Quarterly National Household Survey*.²

¹ Central Statistics Office, (2013). *Quarterly National Household Survey Quarter 3 2013*. Cork: Central Statistics Office.

² <http://www.cso.ie/en/qnhs/releasesandpublications/qnhs-calendarquarters/>

In order to tackle the problem of long-term unemployment, for both the individual (e.g., scarring effects) and society at large (e.g., productivity losses), the Government published an updated *Pathways to Work* strategy in July 2013. This document contains a 50-point action plan to combat long-term unemployment, and some of the objectives of the actions set out in it include:

- provision of additional employment and training places for long-term unemployed individuals,
- improved progression from State-provided employment and training schemes into employment,
- provision of more attractive incentives for employers to recruit long-term unemployed individuals,
- greater engagement by the private, community, voluntary and non-for-profit sectors in the delivery of employment services,
- a faster roll-out of the full *Intreo* work activation service nationwide,
- a more effective interplay between welfare payments, tax and in-work payments to reduce welfare traps and make work pay,
- a new Housing Assistance Payment to replace payment of rent supplements via the welfare system to people with a long-term requirement for subsidised accommodation,
- a staged roll-out of a Youth Guarantee so young unemployed people will, when the guarantee is fully rolled out, receive a good-quality offer of employment, continued education, an apprenticeship or a traineeship within a period of four months of becoming unemployed or leaving formal education.³

The various actions are to be administered by the Departments and Agencies with responsibility for assisting unemployed individuals.

In addition, prior to the publication of the updated *Pathways to Work* document, the Government also introduced a new education and training initiative specifically for long-term unemployed individuals called *Momentum*. The objective of this programme, which was launched in December 2012, is to assist long-term unemployed people to develop the skills required to access work in those sectors of the economy where there are job opportunities. All of the education and training projects that are provided under *Momentum* are free and can be conducted on a full-time or part-time basis. In addition, *Momentum* projects are from Levels 3 to 5 on the National Framework of Qualifications (NFQ) or to an industry-required certification.

³ Department of the Taoiseach (2013). *Pathways to Work 2013. 50 Point Action Plan to Target Long-term Unemployment*. Dublin: The Department of the Taoiseach (<http://www.welfare.ie/en/downloads/Pathways-to-Work-2013.pdf>)

Finally, the Government is currently piloting a new employer incentive scheme called *JobsPlus* that is designed to encourage employers to hire long-term unemployed people. Under this scheme, which replaced the *Revenue Job Assist and Employer Job (PRSI) Exemption Scheme* in July 2013, the Department of Social Protection (DSP) pays participating employers monthly in arrears over a 24 month period. There are two incentive options:

- a payment of €7,500 for each person recruited who has been unemployed for more than 12 but less than 24 months, or
- a payment of €10,000 for each person recruited who has been unemployed for more than 24 months.

While all of these measures are to be welcomed, little is known about the underlying profile of long-term unemployed individuals, or information on the factors associated with a successful transition from their current labour market state to employment. Such information is likely to be useful in the design of more targeted initiatives aimed at specific sub-groups of the long-term unemployed population. This Special Article attempts to fill this information gap by:

1. examining the profile of long-term unemployed individuals during the Celtic Tiger era (2006) and as the economy emerged from recession (2011), and
2. identifying the characteristics associated with a successful transition from long-term unemployment to employment over the same time periods.

The remainder of this Special Article is structured as follows. Section 2 describes the data and methodology that we used to conduct our analysis. Section 3 presents a descriptive profile of long-term unemployed people in Ireland in 2006, 2011 and 2013, while the results from our labour market transition analysis are presented in Section 4. Finally, we conclude by summarising our findings in Section 5.

2. Data and Methodology

The data used in this study come from the *Quarterly National Household Survey (QNHS)* longitudinal data file, which is compiled by the Central Statistics Office (CSO).⁴ The *QNHS* provides quarterly labour force data (e.g. employment and unemployment rates, etc.). The survey is continuous and targets all private households. Each quarter, approximately 26,000 households are sampled.⁵ Households are asked to take part in the survey for five consecutive quarters. In each quarter, one-fifth of the households surveyed are replaced and the *QNHS*

⁴ The CSO is Ireland's national statistical office. We would like to thank the CSO for making the *QNHS* longitudinal data available to us, and also to Brian Ring (CSO) for providing valuable comments on this Special Article.

⁵ The CSO introduced a new sample in Quarter 4 2012 as a result of the 2011 Census of Population. The new sample is being introduced on an incremental basis across each quarter from Quarter 4 2012 to Quarter 4 2013. Thus, the new sample will not be fully effective until Quarter 4 2013.

sample involves an overlap of 80 per cent between consecutive quarters and 20 per cent between the same quarters in consecutive years. While participation in the *QNHS* is voluntary, the response rate is high (approximately 85 per cent).⁶ One of the main benefits of the *QNHS* longitudinal data is that it allows researchers to track individuals for up to 5 consecutive quarters.

In this study, we examine the labour market status of long-term unemployed individuals⁷ both pre the Great recession and at the latter stages of the economic downturn. Specifically, we selected Quarter 2 2006 as the starting point for our analysis, which was during Ireland's Celtic Tiger era, and Quarter 2 2011, which is the year that the economy begun to emerge from the recession (see Barrett and McGuinness, 2012)⁸. We drew a balanced panel by focussing on individuals that were long-term unemployed on entering the survey and who remained in the survey for the next quarter⁹: we were not able to use additional quarters of data to examine exits at 6, 9 and 12 months as the number of long-term unemployed individuals in 2006 was too small. Thus, we focussed on long-term unemployed individuals' transition patterns over a three-month time period, concentrating specifically on their transitions from long-term unemployment into employment. Once we drew our balanced panel, we transformed the panel into a cross-sectional dataset based on the characteristics of individuals observed in Quarter 2 2006 and Quarter 2 2011 respectively, and incorporated their transition behaviours in Quarter 3 for each of the years examined. Although migration has been a feature of Ireland's recession, and it can be expected that a certain proportion of long-term unemployed people will have emigrated in the last few years, it is not feasible to study the impacts of emigration with the *QNHS* longitudinal data.

In terms of methodology, we estimated a binary probit model for each time point to identify the characteristics associated with the successful transition from long-term unemployment to employment over a three-month period. The characteristics examined included gender, age, educational attainment, geographic location, nationality, previous sector of employment and methods of job search. In the estimated models, the dependent variable equalled one if a long-term unemployed individual transitioned to employment during the observation period and zero otherwise.

⁶ Information provided by the CSO.

⁷ The official ILO measure that is in the *QNHS* data and the unemployment duration information were used to create our long-term unemployment sample, which consists of individuals unemployed for 12 months and above.

⁸ Barrett, A. and S. McGuinness. (2012). "The Irish Labour Market and the Great Recession", CESifo DICE Report 2/2012, pp.27-33.

⁹ A balanced panel is constructed by retaining only individuals that were selected in the first quarter of a researcher's analysis who remain in the data continuously for each subsequent quarter of data examined.

3. Descriptive Statistics

Table 1 presents characteristic information for those that were long-term unemployed in Quarter 2 2006 and 2011, the time-points for which our transition analysis relates to, along with the most recent available data point (Quarter 2 2013).¹⁰

TABLE 1 Profile of Long-term Unemployed Individuals (Per Cent)

	Q2 2006	Q2 2011	Q2 2013
Gender			
Male	71.2	73.2	70.4
Female	28.8	26.8	29.6
Age			
15-24	23.5	16.3	12.7
25-34	27.3	33.1	28.3
35-44	21.3	24.5	26.3
45-54	19.9	17.9	19.8
55 and Above	8.0	8.1	12.7
Nationality			
Irish	86.2	81.5	82.4
Non-Irish	13.8	18.5	17.6
Total	32,038	178,139	175,045

Source: Constructed using data from the Quarterly National Household Survey longitudinal dataset, CSO.

In terms of gender, over 70 per cent of long-term unemployed people in Ireland are male, which is a feature that has remained relatively stable over the time period analysed.

With respect to the age distribution of long-term unemployed individuals, there have been some marked changes between Quarter 2 2006 and 2011, with some further adjustments for some age groups between Quarter 2 2011 and 2013. Since 2006, the share of long-term unemployed aged 15 to 24 has declined steadily and currently stands at 13 per cent. Interestingly, the proportion aged 25 to 34 increased between Quarter 2 2006 and 2011, but there has been a decline in this age category between 2011 and 2013. On the other hand, the percentage of long-term unemployed people aged 35 to 44 has increased continuously since 2006, as has the share aged 55 and above, with a particularly large increase in this age category between Quarter 2 2011 and 2013. The proportion of long-term unemployed individuals aged 45 to 54 declined slightly between Quarter 2 2006

¹⁰ Due to resource constraints, we were not in a position to link the most recently available QNHS data - Q3 2013, with our existing longitudinal dataset.

and 2011, but increased again between Quarter 2 2011 and 2013. Emigration of young people over the recession is likely to have contributed to this change in the age profile of long-term unemployed people between 2006 and 2013.

In relation to nationality, the proportion of long-term unemployed that are non-Irish has increased slightly since 2006, and the figure currently stands at 18 per cent.

The educational distribution of long-term unemployed individuals in Quarter 2 2006, 2011 and 2013 is shown in Table 2. The proportions with a Lower Secondary or less qualification have fallen since 2006, with particularly large declines in the share with a Primary or less education. On the other hand, there have been increases in the percentages holding Upper Secondary and Post-Secondary qualifications. There were increases in the proportions holding a third-level education over this time period as well. In Quarter 2 2006, very few long-term unemployed people held an Ordinary or Higher Degree qualification, but now over 16 per cent of long-term have one of these third-level degrees.

TABLE 2 Educational Attainment of Long-term Unemployed Individuals (Per Cent)

	Q2 2006	Q2 2011	Q2 2013
Educational Attainment			
Primary	29.5	12.2	12.7
Lower Secondary	27.0	22.6	19.7
Upper Secondary	20.6	29.0	27.9
Post Secondary	8.8	16.3	18.7
Ordinary Degree	-	8.4	8.2
Higher Degree and Above	-	8.0	9.6
Unknown	-	3.5	3.1
Total	32,038	178,139	175,045

Note: Estimates considered unreliable due to the education category containing less than 30 long-term unemployed individuals.
Source: Constructed using data from the *Quarterly National Household Survey* longitudinal dataset, CSO.

Table 3 presents the previous employment sector distribution of long-term unemployed individuals in Quarter 2 2006, 2011 and 2013. Reflecting the collapse in the housing sector, the share of long-term unemployed people formally employed in the construction sector doubled between 2006 and 2011, while there has been a slight decline between 2011 and 2013. There were also increases in the proportions of long-term unemployed individuals formally employed in the Education and Health sectors between 2006 and 2011, which most likely reflects the Government's commitment to reduce public sector

numbers to 282,500 by the end of 2015.¹¹ The share of long-term unemployed people that were formally employed in the Agriculture, Transport, Professional and Other Services sectors increased between 2006 and 2011 as well.

TABLE 3 Previous Sector of Employment of Long-term Unemployed Individuals (Per Cent)

	Q2 2006	Q2 2011	Q2 2013
Sector			
8 Years Plus Since Person Last Worked ¹	28.2	19.9	24.8
Agriculture, Forestry and Fishing	-	1.3	-
Industry	16.3	11.2	10.5
Construction	15.0	30.2	23.7
Wholesale and Retail	10.6	11.2	11.2
Transportation and Storage	-	3.4	4.1
Accommodation and Food Services	5.5	5.3	5.3
Information and Communication	-	-	-
Financial, Insurance and Real Estate	-	-	1.8
Professional, Scientific and Technical	-	2.8	2.6
Administrative and Support Services	4.8	3.8	3.1
Public Administration and Defence	-	-	-
Education	-	1.4	1.6
Health and Social Work	-	2.6	4.0
Arts and Entertainment	-	-	1.7
Other Services	-	2.0	1.6
Other NACE Activities	-	-	-
Total	32,038	178,139	175,045

Note: ¹ Previous sector of employment information is not made available by the CSO for individuals that have been unemployed for a period of 8 years or more. In addition, this information is not available for respondents that indicated that they had no previous work experience.

Source: Estimates considered unreliable due to the sector containing less than 30 long-term unemployed individuals. Constructed using data from the *Quarterly National Household Survey* longitudinal dataset, CSO.

Table 4 provides unemployment duration information for those that were long-term unemployed in Quarter 2 2006, 2011 and 2013. Quite worryingly, the relative share of individuals with durations of below 18 months fell between 2006 and 2011 with a corresponding rise in the shares with unemployment durations of 18 to 23 and 24 to 47 months. The share of long-term unemployed people with unemployment durations of less than 18 months fell further between 2011 and 2013, with a considerable increase in the share with a four-year-plus unemployment duration.

¹¹ <http://per.gov.ie/2012/03/08/statements-in-dail-on-public-sector-numbers-thursday-8-march-minister-brendan-howlin-td/>

TABLE 4 Unemployment Duration of Long-term Unemployed Individuals (Per Cent)

	Q2 2006	Q2 2011	Q2 2013
UE Duration			
12-17 Months	31.0	24.8	16.4
18-23 Months	14.9	21.3	12.0
24-47 Months	33.9	39.1	37.5
4 Years Plus	20.2	14.8	34.1
Total	32,038	178,139	175,045

Source: Constructed using data from the *Quarterly National Household Survey* longitudinal dataset, CSO.

Finally, in terms of our descriptives we present information on the job search methods that were used by long-term unemployed individuals in Quarter 2 2006, 2011 and 2013 in Table 5. The job search categories are not mutually exclusive, which means that respondents could have selected more than one job search option in the QNHS questionnaire. Between 2006 and 2011, the proportion of long-term unemployed individuals that contacted a public employment office when searching for a job declined, as did the percentages waiting for a call from a public employment office. The use of these job search methods decreased further between 2011 and 2013. The methods of searching for work that increased the most in usage between 2006 and 2011 included: contacting a private employment agency, asking friends/relatives/trade unions, inserting an advert into a newspaper, studying newspaper job adverts, looking for permits/

TABLE 5 Methods used to Search for Employment by Long-term Unemployed Individuals (Per Cent)

	Q2 2006	Q2 2011	Q2 2013
Search Method:			
Contacted public employment office	61.9	56.1	46.0
Contacted private employment agency	25.5	32.7	27.3
Applied directly to employers	80.3	77.3	72.9
Asked friends, relatives, Trade Unions	85.5	89.7	88.2
Inserted/answered newspaper adverts	26.8	32.6	30.3
Studied newspaper adverts	92.0	94.8	92.6
Took a test/interview/exam	33.2	20.2	14.8
Looked for land/premises/equipment	-	-	-
Looked for permits/licences/financial resources	-	1.6	-
Awaiting results from job application	31.1	20.0	18.9
Waiting for a call from public employment office	40.6	26.9	21.4
Awaiting results from public sector recruitment competition	-	1.9	-
Other method used	*	*	12.4

Note: Estimates considered unreliable due to the job search method being used by less than 30 long-term unemployed individuals.
 * Not applicable for this year.

Source: Constructed using data from the *Quarterly National Household Survey* longitudinal dataset, CSO.

financial resources and awaiting results from a public sector recruitment competition. On the other hand, the job search techniques that declined in use were: applying directly to an employer, taking a job test/interview and awaiting the results from a job application. Over both time periods, the main job search methods used by long-term unemployed individuals were: studying newspaper adverts, asking friends/relatives/trade unions and applying directly to an employer. The internet is another job search method that is likely to have increased in usage since the recession. However, we do not have information on this as this job search method is not listed as an option in the QNHS questionnaire.

4. Results

Before going on to discuss the characteristics associated with transitioning from long-term unemployment to employment, Table 6 shows the labour market transition patterns of individuals that were long-term unemployed in Quarter 2 2006 and 2011 over the next three-month period. Unsurprisingly, the proportion remaining continuously unemployed increased over the two periods from 67 per cent (2006) to 80 per cent (2011), while the proportion that transitioned into employment fell from 8.4 per cent to 5.9 per cent over the period. There was also a substantial decline in the percentage of long-term unemployed individuals that moved into economic inactivity¹² between 2006 and 2011, which fell from 24.6 per cent to 14.1 per cent.

TABLE 6 Labour Market Transition Rates of Long-Term Unemployed Individuals

	Continuously Unemployed	Into Employment	Into Inactivity
Q2 2006	67.0	8.4	24.6
Q2 2011	80.0	5.9	14.1

Source: Constructed using data from the *Quarterly National Household Survey* longitudinal dataset, CSO.

Table 7 presents the results from our probit models that measured the impact of various characteristics on the likelihood of a long-term unemployed individual transitioning to employment within the following three months after Quarter 2 2006 and 2011 respectively. A number of notable changes occurred with respect to the marginal impact of certain observable characteristics over the period.

The impact of age changed markedly. During 2006, long-term unemployed individuals aged between 20 and 34 tended to have the highest probability of

¹² The economically inactive are people that are not in employment or unemployment (e.g. people that are studying, looking after family or sick relatives, etc.).

exiting to employment. However, by 2011 all long-term unemployed individuals aged 20 and above were less likely to find jobs relative to those aged 15 to 19.

Between 2006 and 2011 the relative importance of education on the probability of exiting long-term unemployment into employment fell. For instance, relative to those with a Primary or less education (the reference category), the marginal impact of holding a Leaving Certificate fell from 7 per cent in 2006 to 2 per cent in 2011, while the positive impact of having a Third-level Degree or higher qualification declined from 30 per cent to 7 per cent. It must be noted, however, that the magnitude of the fall in the impact of education between 2006 and 2011 needs to be interpreted with caution. This is due to a change in the educational attainment question asked in the *QNHS*, which means that data from Quarter 2 2009 is not directly comparable with previous quarters. Nevertheless, the results still suggest that there has been a fall in the impact of education on a long-term unemployed person's likelihood of transitioning to employment between 2006 and 2011.

Regarding previous sector of employment, relative to the Construction sector, long-term unemployed individuals who were previously employed in Wholesale and Retail, Administrative and Support Services and Education, and Information and Communication (to a lesser extent), were more likely to find jobs over a three-month period in 2006. In 2011, however, former Wholesale and Retail workers were less likely to transition to employment compared to former Construction sector workers. The same is true for former Industry, Other Activity and Health and Social Work Activity employees.

TABLE 7 Probability of Transitioning from Long-term Unemployment to Employment

	2006	2011
Gender (Ref = Female)		
Male	-0.020**	-0.005***
	(0.008)	(0.002)
Age (Ref = Age 15-19)		
Age 20-24	0.108***	-0.032***
	(0.026)	(0.003)
Age 25-34	0.063***	-0.050***
	(0.021)	(0.004)
Age 35-44	-0.053***	-0.048***
	(0.010)	(0.003)
Age 45-54	0.028	-0.048***
	(0.018)	(0.002)
Age 55plus	0.004	-0.047***
	(0.017)	(0.002)
Educational Attainment (Ref = Primary or Less)		
Leaving Certificate	0.072***	0.019***
	(0.009)	(0.002)

TABLE 7 Continued

	2006	2011
Post Leaving Cert Level (includes apprenticeships)	-	0.060***
	-	(0.003)
Third-level Non-Degree	0.157***	0.003
	(0.027)	(0.003)
Third-level Degree or Higher	0.296***	0.072***
	(0.043)	(0.005)
Geographic Location (Ref = Dublin)		
Border	-0.069***	-0.016***
	(0.005)	(0.002)
Mid-East	0.082***	-0.000
	(0.016)	(0.003)
Midlands	-0.046***	-0.023***
	(0.007)	(0.002)
Mid-West	0.038***	0.024***
	(0.013)	(0.003)
South-East	0.088***	-0.006***
	(0.013)	(0.002)
South-West	0.038***	0.023***
	(0.012)	(0.003)
West	-	0.032***
	-	(0.003)
Nationality (Ref = Non-Irish)		
Irish	0.047***	0.020***
	(0.006)	(0.002)
Job Search Methods		
Contacted Public Employment Office	-0.054***	-0.017***
	(0.009)	(0.002)
Contact private Employment Agency	-0.020***	0.001
	(0.006)	(0.002)
Applied Directly to Employers	0.045***	0.007***
	(0.006)	(0.002)
Asked Friends/Relatives/Trade Unions	-0.111***	-0.025***
	(0.015)	(0.003)
Studied Adverts in Newspapers	0.038***	-0.045***
	(0.006)	(0.004)
Inserted/Answered Adverts in Newspapers	-0.036***	-0.005***
	(0.005)	(0.002)
Undertook Test/Interview/Exam	0.000	0.015***
	(0.006)	(0.002)
Waiting for a Call from Public Employment Office	-0.014**	0.021***
	(0.006)	(0.002)
Waiting Results of a Public Sector Recruitment Competition	0.073***	0.014***
	(0.009)	(0.002)
Waiting Results of a Job Application	-0.046***	0.064***
	(0.007)	(0.007)
Previous Employment Sector (Ref = Construction)		
Agriculture	-	0.006
	-	(0.005)
Industry	-0.001	-0.020***
	(0.008)	(0.002)
Wholesale and Retail	0.072***	-0.012***
	(0.014)	(0.002)

TABLE 7 Continued

	2006	2011
Transportation and Storage	-	0.016***
	-	(0.004)
Accommodation and Food Services	-0.018	0.012***
	(0.011)	(0.004)
Information and Communication	0.069*	0.100***
	(0.038)	(0.009)
Financial, Insurance and Real Estate Activities	-	0.060***
	-	(0.008)
Professional, Scientific and Technical Activities	-	0.011***
	-	(0.004)
Administrative and Support Service Activities	0.194***	0.017***
	(0.031)	(0.004)
Public Administration and Defence	-	-0.004
	-	(0.006)
Education	0.391***	-
	(0.067)	-
Human Health and Social Work Activities	-	-0.007*
	-	(0.004)
Other Activities	-0.001	-0.018***
	(0.015)	(0.003)
No Sector Information Available	-0.027***	0.009***
	(0.008)	(0.003)
Observations	9,885	104,705
Pseudo R-squared	0.202	0.0874

Note: Standard errors in parentheses;

*** p<0.01, ** p<0.05, * p<0.1

Indicates that observations with such characteristics were dropped from the analysis as the characteristic perfectly predicated a non-transition from long-term unemployment to employment.

In terms of job search methods, in 2006 long-term unemployed individuals who had applied directly to employers, studied adverts in newspapers or were waiting the result of a public sector recruitment competition were all more likely to find employment within a three-month period. Conversely, long-term unemployed individuals who had been in contact with or were awaiting a call from a public employment office, who had been in touch with private employment consultants, inserted adverts in newspapers, relied more on friends and relatives for job opportunities or were awaiting the results of a job application were less likely to exit to employment in 2006. It should be noted that the negative effect observed for the public employment service measures should not necessarily be interpreted as evidence of ineffective activation given that in many instances claimants may be awaiting places on training courses, etc., which can also lead to lower rates of transitions to employment. In 2011, the positive employment transition impacts associated with contacting employers directly and awaiting the results of a public sector recruitment exercise remained positive, although the marginal effects fell somewhat. In 2011 long-term unemployed individuals awaiting a call from a public employment office were now more likely to exit. Finally, those long-term unemployed individuals who had sat some form of job

entry test/undertook an interview and who were awaiting the results of a job application were more likely to find employment in 2011.

5. Conclusions

The structure of the long-term unemployed population changed considerably between 2006 and 2011, particularly in terms of its age profile, levels of educational attainment, previous employment sector and unemployment durations.

Relative to 2006, the share of long-term unemployed individuals aged below 25 declined substantially. With respect to education, there has been a general increase in the share of individuals who have been unemployed for 12 months or more with Leaving Certificate and above qualifications.

In relation to previous sector of employment, the share of long-term unemployed who were formally employed in the Construction sector doubled between 2006 and 2011, increasing from 15 per cent to 32 per cent. This sectoral shift clearly reflects the collapse in the housing market. There were increases in the proportions that were formally employed in the Education and Health sectors between 2006 and 2011 as well, which most likely reflects the Government's commitment to reduce public-sector numbers to 282,500 by the end of 2015.

When we examined the unemployment durations of long-term unemployed people, we found that the share with less than 18 month durations fell between 2006 and 2011, with corresponding increases in the proportions with unemployment periods of 18 to 23 and 24 to 47 months. The numbers with unemployment durations of less than 18 months have continued to fall between 2011 and 2013, with, unfortunately, quite significant increases in the shares with four year plus unemployment periods.

The main job search methods used by long-term unemployed individuals have not changed since the recession. In both 2006 and 2011, studying newspaper adverts, asking friends/relatives/trade unions and applying directly to employers were the main techniques used. There has been a decline in the use of certain methods over the time period analysed (e.g., contacting a public employment office, applying directly to an employer, taking a job interview and awaiting the results of a public sector recruitment competition), while other job search methods increased in usage (e.g., contacting a private employment agency, inserting an advert in a newspaper, asking friends/relatives/trade unions).

Not unexpectedly, the study found that the rate of transition from long-term unemployment to employment over a three-month period fell from 8.4 per cent in 2006 to 5.9 per cent in 2011, while the proportions that remained continuously unemployed increased from 67 per cent to 80 per cent.

Our probit analysis showed that a number of notable changes took place between 2006 and 2011 with respect to the marginal impact of various individual characteristics on a long-term unemployed person's likelihood of transition to employment. In 2006, long-term unemployed individuals aged between 20 and 34 had the highest probability of exiting to employment, but by 2011 all long-term unemployed individuals aged 20 and above were less likely to find work relative to those aged 15 to 19. Between 2006 and 2011, the positive marginal impact of education on finding a job declined for the long-term unemployed.

In relation to job search methods, the positive employment transition effect associated with applying directly to an employer for a job fell between 2006 and 2011, as did the positive impact associated with waiting for the results from a public sector recruitment competition. Studying job adverts in newspapers assisted long-term unemployed people to find jobs in 2006, but this job search activity reduced their likelihood of finding work in 2011, as did contact with a public employment office, asking friends/relatives/trade unions and answering adverts in newspapers: these latter job search methods had a negative effect in 2006 as well. On the other hand, undertaking a job test/interview, waiting for a call from a public employment office and waiting the results from a job application all had a positive effect on a long-term unemployed person's likelihood of transitioning to work in 2011.

Based on these findings, the substantial change in the profile of long-term unemployed individuals between 2006 and 2011 should be born in mind when designing schemes to assist the long-term unemployed to re-integrate into the labour market. In particular, it would appear that the age and education profile allows for a greater use of programmes with a higher skill orientation. Furthermore, the high share of long-term unemployed formally employed within the Construction provides a basis for specific re-training programmes centred around enhancing the considerable and transferable skills of such long-term unemployed individuals, in a way that improves their employability.

In terms of job search methods, the evidence suggests that job search assistance should emphasise the importance of employer engagement, and actively encourage claimants to apply directly to employers for jobs, as opposed to relying on contacts made through family or friends as such direct contact with employers

tends to lead to more successful exits to employment for the long-term unemployed.

Research Note

The Impact of Fiscal Policy on the Economy

John FitzGerald*

Introduction

Since 2008 there has been a series of very tough Budgets, which took a large amount of money out of the economy. While these measures were essential to restore order to the public finances, the contractionary impact of these measures on the wider economy was very severe. The impact on the economy of the fiscal policy measures taken over the period 2008 to 2012 has been analysed in Kearney (2012). The cumulative impact of recent budgets was also considered in FitzGerald and Kearney (2013). Here we apply the same methodology to estimate the likely impact of the 2013 and 2014 Budgets on the economy.

Measuring the actual impact of individual Budgets on the economy is not straightforward.

First, a model of the economy is needed to undertake this task. Here we use the *HERMES* model of the economy (Bergin *et al.*, 2013) which was specifically designed, *inter alia*, to analyse the effects of fiscal policy.

Second, a frequent misconception is that the existence of a budgetary deficit is, in itself, stimulatory and that a surplus is contractionary. However, when confronted with recent experience the absurdity of this approach, from an economic point of view, is clear. Ireland still has a large Budget deficit in spite of five years of contractionary Budgets. Nobody could suggest that the current expected deficit for 2013 means that Budgetary policy is stimulatory. It is not even the change in the Budget deficit itself that reflects whether a Budget is serving to expand or contract demand, because the change in the deficit is significantly affected by the economic cycle. Thus an increase in the deficit may occur because of a fall in underlying economic activity rather than because the government has decided to increase expenditure or to cut revenue. To determine the actual fiscal stance a model of the economy is needed to disentangle discretionary changes in government borrowing from changes due to cyclical factors.¹

¹ The discretionary change in fiscal policy, as defined here, is similar to the change in the structural budget balance.

Third, the way Budgets are defined is not always very meaningful from an economic point of view. The definition of discretionary budgetary changes that is normally used in the Budget documents is based on whether or not a change in the law actually takes place.² For example, in the case of income tax the standard approach in the Budget is to define “no change” as a situation whereby tax rates and allowances are left at their previous year’s level. With inflation and a progressive tax system such an approach would see the average rate of income tax rise with inflation in incomes. Instead, the approach normally taken by economists is to treat “no change” as meaning that the average rate of income tax remains unchanged at the previous year’s level. In undertaking an economic assessment of the impact of Budgets a similar approach is applied to other areas of taxation and revenue, including an assumption that social welfare payments are indexed – held unchanged in real terms.³

Methodology

Here we apply the methodology set out in Kearney (2012), to analyse the impact of the 2013 Budget on the economy in 2013 and of the 2014 Budget on the economy in 2014. The multi-year impact of individual budgets was considered in FitzGerald and Kearney, 2013.

The approach we use is to first run the *HERMES* macro-economic model of the Irish economy with the actual budgetary measures implemented for the year being considered. This model run produces estimates for the key economic aggregates, such as GNP, GDP, employment and also for the key fiscal aggregates. This initial forecast is also dependent on the key exogenous assumptions (e.g., about world growth). Thus, for 2014, our initial model-based forecast incorporates the effects of the October Budget for the year, i.e., a planned *ex ante* adjustment of €2.6 billion.

We then do a second run of the model where, instead of the budgetary changes, we assume certain indexation rules, which incorporate our definition of a “neutral” Budget, where the government is neither deflating or inflating the economy. This indexed budget is intended to simulate a “what if there were no policy changes” scenario relative to the previous year. We then compare this “indexed” outcome for the budget with the actual outturn in each year. The difference between the indexed and actual outcome provides an estimate of the fiscal stance.

² This approach is used in many other jurisdictions.

³ A similar approach is used in Callan *et al.*, 2013.

The full indexed budget is computed assuming no change in average tax and expenditure rates (e.g. for social welfare payments) from the previous year. These rates are applied to the relevant revenue and expenditure bases to arrive at estimates of tax revenue and expenditure. The use of average tax and expenditure rates ensures full indexation of the tax and welfare system. There is one exception to these indexation rules. For non-cyclical expenditure items (e.g., government current expenditure on goods and services and government investment), we assume no volume growth. Values of public investment, public employment and public consumption were computed on this basis. In normal times such an indexation rule would be deflationary. However, given the collapse in the economy, this “no real growth” rule could, in itself, be regarded as having an expansionary bias in the years 2009-13. To the extent that this is the case, our estimate of the fiscal stance in those years will overstate the contractionary effect of fiscal policy. On balance we considered that a long-run no-growth indexation rule was the best approximation to a realistic “no policy change” stance over the period in question.

There are some special measures that affect the Budget numbers that may not have a direct impact on the economy and we treat them separately. They are included in both the base run and the indexed run, thus excluding them from the category of “normal” discretionary fiscal policy. These items are the reduction in payments by the banks in respect of the bank guarantee and also the special once-off costs arising from the winding up of IBRC in 2013. These two measures have a large impact on the budgetary numbers for 2013 (and a smaller impact in 2014). Together they have added almost one percentage point of GDP to the deficit for 2013. (In spite of this, the deficit is forecast to fall significantly in the winter 2013 *Quarterly Economic Commentary*.) However, in both cases the additional expenditure (on winding up IBRC) or reduced revenue (from the banks) is unlikely to have any impact on domestic demand this year. In the case of the reduced payments for the bank guarantee it is most unlikely to have any impact on their lending behaviour in 2014 and, hence, on the wider economy. Thus this reduction in government revenue will not raise household incomes or result in significant new investment by the company sector, at least in 2013 or 2014.⁴

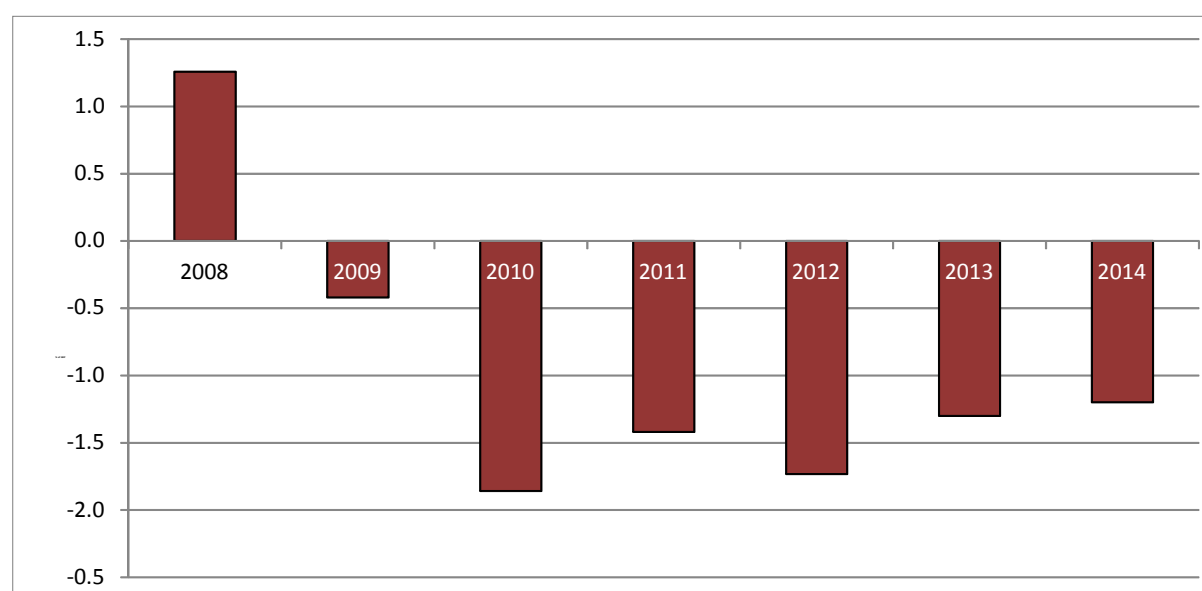
In the case of the IBRC related payments, this expenditure merely pays off existing liabilities of the banks (to depositors). These depositors knew their assets were guaranteed and the payment by the state will neither affect their expected income position nor their net wealth position. Thus there should be no change in household or company behaviour arising from this expenditure.

⁴ In the long run returning the banks to profitability should have a positive impact on the economy.

Impact on the Economy

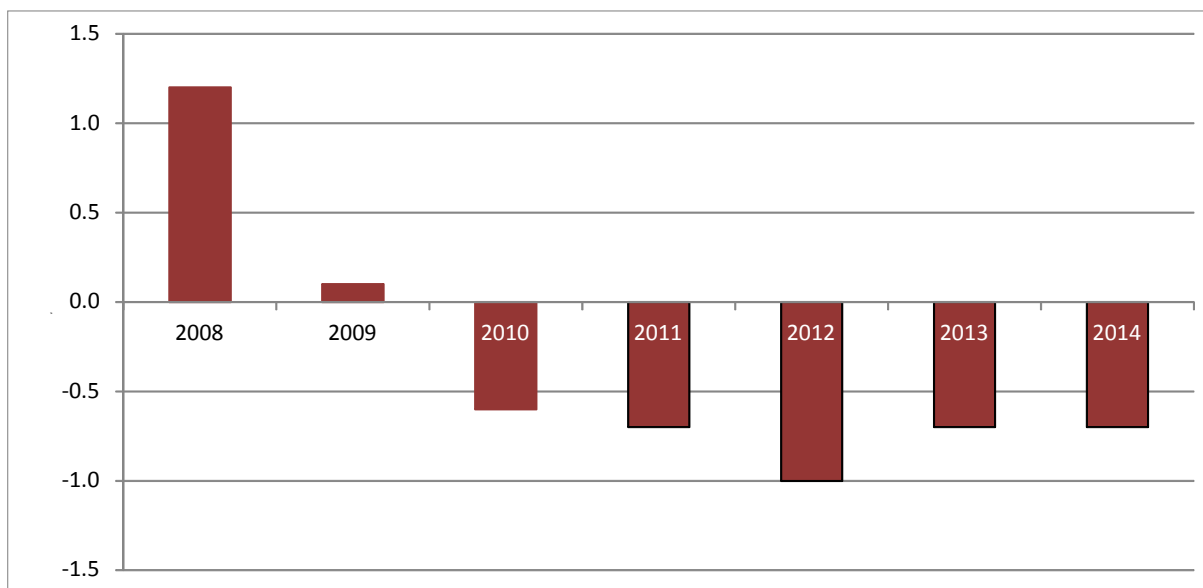
Figure 1 shows the *ex post* effects of discretionary budgetary policy since 2008 on government borrowing as a percentage of GDP.⁵ The Budgets for 2010 to 2013 effected a reduction in government borrowing each year by around 1.5 percentage points of GDP. The reduction effected by the 2013 and 2014 Budgets will be around 1.2 percentage points of GDP. The cumulative effect of the Budgets between 2009 and 2014 has been a reduction in the government deficit by approximately eight percentage points of GDP. (A scenario considering what would have happened if there had been a failure to implement any fiscal adjustment from 2010 onwards was considered in Appendix 2 of FitzGerald and Kearney, 2013.)

FIGURE 1 Change in General Government Deficit as a % of GDP



This reduction in the deficit through discretionary fiscal policy has come at a significant price in terms of reducing GDP (Figure 2). Fiscal policy, in deflating the economy, reduced the rate of growth of GDP by around 0.7 percentage points in both 2013 and 2014. Over the period 2009 to 2014 the cumulative effect of the discretionary changes in a series of six tough budgets will have been to reduce the level of GDP in 2014 by a cumulative 3.6 per cent of GDP.

⁵ As discussed above, for the 2013 Budget we have excluded certain measures (payments in respect of IBRC and reduced charges to banks for guarantee). That would have served to offset the reduction in the borrowing by approximately one percentage point of GDP.

FIGURE 2 Effect of Discretionary Fiscal Policy on GDP, %

Conclusions

The series of tough Budgets between 2009 and 2014 have served to reduce the level of the General Government Deficit by around 8 percentage points of GDP. We forecast that there will still be a deficit of 4.4 per cent of GDP in 2014. The effect of the 2014 Budget will be to reduce the rate of growth of GDP in 2014 by around 0.7 percentage points. The effect on GNP will be slightly higher at around 0.9 percentage points. Thus, in 2014 the underlying growth rate of GNP would be around 3.6 per cent in the absence of any Budgetary cutbacks.

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